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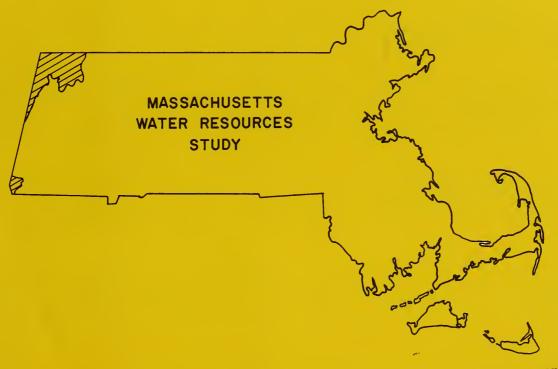
UNITED STATES DEPARTMENT of AGRICULTURE

INVENTORY

of

POTENTIAL and EXISTING UPSTREAM RESERVOIR SITES

HUDSON STUDY AREA



U.S. DEPARTMENT of AGRICULTURE

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MASSACHUSETTS WATER RESOURCES COMMISSION

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FOREWORD

The United States Department of Agriculture, in cooperation with the Massachusetts Water Resources Commission, is participating in the Massachusetts Water Resources Study of the water and related land resources of the Commonwealth. One phase of the study is the inventorying of potential and existing upstream reservoir sites.

The Commonwealth of Massachusetts, through the Water Resources Commission, provides guidance and significant financial contribution toward this phase of the Massachusetts Water Resources Study. The Massachusetts Water Resources Commission, to fulfill its responsibilities under Chapter 21, Sections 8 through 15 of the Massachusetts General Laws, requires technical and engineering data and information on potential upstream reservoir sites. The Department of Agriculture is participating in this study under the provisions of Section 6, of the Watershed Protection and Flood Prevention Act (Public Law-566, 83rd Congress, as amended) which authorizes the Secretary of Agriculture to cooperate with other federal, state and local agencies, in surveys and investigations of the watersheds of rivers and other waterways as a basis for the development of coordinated programs.

This report, prepared by the Soil Conservation Service and submitted by the USDA Field Advisory Committee to the Water Resources Commission, identifies and inventories potential and existing upstream reservoir sites within the Hudson Study Area.

The Massachusetts Water Resources Commission will use this report, together with other reports and studies prepared by the United States Department of Agriculture and others, in the preparation of a comprehensive plan for the Commonwealth's water and land resources.

The information and data contained herein will also assist local, state and federal agencies in their specific planning activities for the coordinated and orderly conservation, development, utilization and management of the water and land resources to meet the rapidly expanding needs.

Dr. Benjamin Isgur State Conservationist Soil Conservation Service and

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Acknowledgment is made to those who assisted in and contributed to the investigations, studies, and development of this report. These include:

Board of Supervisors Berkshire Conservation District

Department of Civil Engineering University of Massachusetts

Division of Water Pollution Control Massachusetts Water Resources Commission

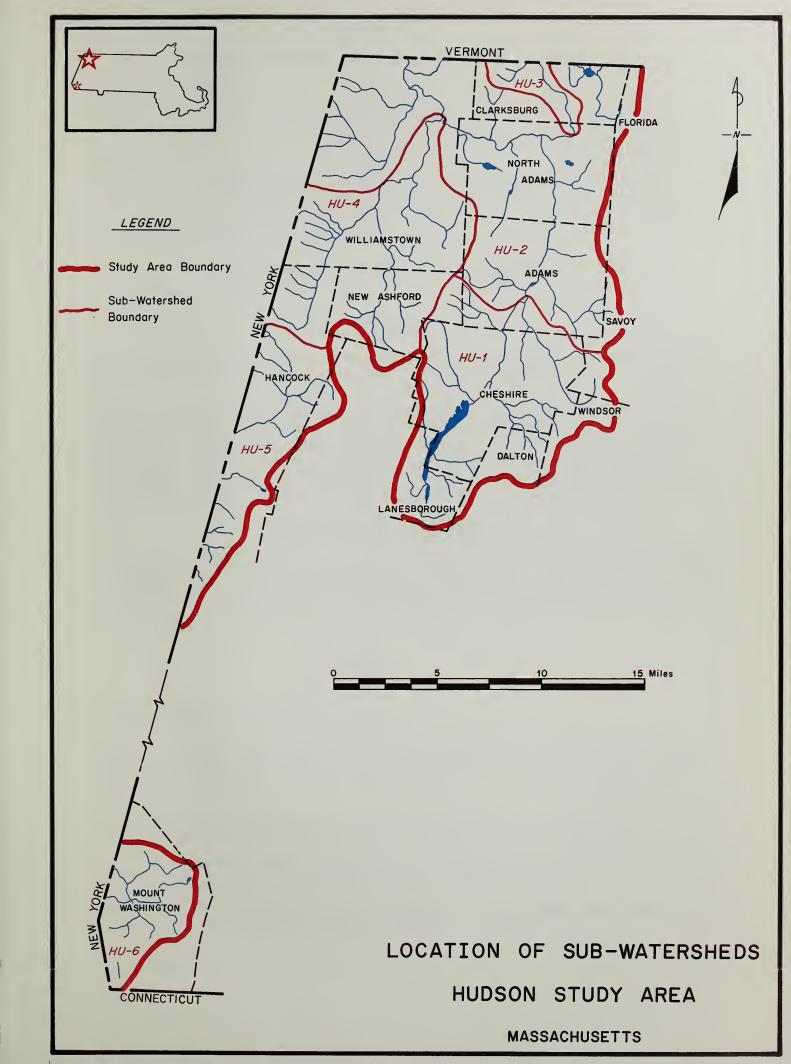
Massachusetts Department of Natural Resources

Soil Conservation Service personnel prepared this report. Ernest Richards was responsible for the development of the engineering phases of the report. Raymond Curran and Chester Konieczny collected and processed basic site data. Donald Mills reported on geological conditions. Doris Butts typed the final manuscript. James Wesoloski was responsible for editing and publication.

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INVENTORY OF

POTENTIAL AND EXISTING UPSTREAM RESERVOIR SITES

in the

HUDSON STUDY AREA

prepared by the

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

in cooperation with the

MASSACHUSETTS WATER RESOURCES COMMISSION

INTRODUCTION

This report presents data on 34 potential and 15 existing reservoirs in the Hudson Study Area in Berkshire County, Massachusetts.

Many of the potential reservoirs could be developed as municipal water supplies, recreation lakes, fish and wildlife areas, or floodwater retarding structures. The inventory can be used by the state, municipalities, planning boards, conservation commissions, other units of government, and private individuals in determining the best use for the limited number of potential reservoir sites in the study area.

DESCRIPTION OF STUDY AREA

The Hudson Study Area includes the drainage areas in Massachusetts which ultimately flow into the Hudson River in New York. The study area, which covers about 129,200 acres or 202 square miles, is divided into six subwatersheds. All or portions of 14 towns are located within the study area.

CRITERIA

Potential Reservoir Sites

The primary considerations used to identify potential reservoir sites were: suitable topography for a dam and reservoir, sufficient drainage area to maintain the proposed reservoir and a relatively undeveloped reservoir area.

The following criteria were used as a guide in site selections:

- 1. Drainage area -- larger than one-half square mile, but not greater than 50 square miles.
- 2. Ratio of drainage area to beneficial pool area--not less than 10 to 1.

- 3. Minimum beneficial pool depth -- 7 feet at the dam.
- 4. Minimum beneficial pool area -- 10 acres.
- 5. Minimum beneficial pool capacity -- 100 acre-feet.
- 6. Maximum beneficial pool capacity -- storage volume equal to 25 inches of runoff from the drainage area.
- 7. Maximum height of dam 100 feet.
- 8. Pool area relatively undeveloped -- no housing developments, industrial areas, or major highways inundated.

In 1968, the Soil Conservation Service prepared a report entitled, "A Study of Potential Reservoir Sites in Massachusetts - Hudson River Basin." This report became one of the first in this series of publications inventorying reservoir sites in the state. The study, which was financed by the Massachusetts Water Resources Commission, located 35 potential sites. Because of the many improvements in criteria, methods, and presentation format, the 1968 study was updated. Thirty-four of the original 35 sites are presented in this report. One site was dropped from the inventory because of recent development in the area.

Existing Reservoirs

Existing reservoirs were located using the 7½ minute U.S. Geological Survey (USGS) qiadrangle sheets that cover the study area. Two criteria were used to determine sites to be included in this report:

- 1. Surface area -- at least 10 surface acres or a pond identified by name on the USGS topographic map.
- 2. Man-made dam -- The pool must be the result of dam construction.

 Natural ponds and beaver dams are excluded.

INVESTIGATIONS AND ANALYSES

Potential Reservoir Sites

Sites were located using the latest available USGS $7\frac{1}{2}$ minute quadrangle sheets. Natural basins, or topography favorable for storage of water, and an undeveloped pool area were the primary considerations in the initial site selection. Watershed boundaries were delineated on the quadrangle sheets and the drainage area was determined for each site. Water storage areas and volumes available upstream of the site centerline were calculated. Data were also obtained to calculate the volume of earthfill required for the dam and any supplementary dikes that might be needed to maintain a reservoir.

At each site a field reconnaissance was made that included an inventory of land and facilities (man-made structures) that would be affected if a dam and reservoir were developed at the site. If it was determined that the reservoir would flood extensive man-made facilities, or a study of the elevation-area storage data showed that the site did not meet criteria for the study, the site was dropped from further consideration.

A surficial geologic investigation was made of each potential site to determine any obvious geologic conditions that might affect the water-holding capability or require extensive foundation preparation. A preliminary geological report was prepared which outlined the types of materials that might be expected at the site and their effect on construction costs and waterholding capabilities for the site. The report of geologic conditions was based on the geologist's interpretation following the surficial investigation of the site and surrounding area. No borings were made and subsurface conditions may vary from those indicated in this report.

Hydrologic and hydraulic data were calculated using methods developed by the Soil Conservation Service. Rainfall data were obtained from Technical Papers 40 and 49,U.S. Department of Commerce, Weather Bureau. Preliminary structure site analyses for several levels of development for each site were processed by computer, using a program which determines the most economical type of principal spillway; determines the runoff and peak flow for the 100-year frequency, 10-day duration, principal spillway design storm; routes the design storm to set the emergency spillway crest; performs other routings to determine the design high water and top of dam elevations; calculates embankment yardage and other construction quantities; determines the total estimated cost of the reservoir; and calculates "safe yield" for water supply purposes.

Existing Reservoirs

An inventory was made of 15 existing reservoirs. An engineer made a field reconnaissance to determine the physical condition of each structure and to assess the potential for expansion of the reservoir. While at the site, photographs were taken and are included in this report. Ownership and use information for the reservoirs was obtained from records of the Massachusetts Department of Public Works, the Massachusetts Water Resources Commission and from local interviews.

COSTS

Preliminary cost estimates for potential reservoir sites were based on construction costs and land values as of 1974. The cost estimates include: (1) construction costs; (2) contingencies; (3) engineering and administrative services necessary for surveys, geology, final design, and construction inspection; (4) cost for land required for the reservoir and construction of the dam and spillway; and (5) costs associated with purchase or relocation of man-made facilities affected by the constructed reservoir.

Construction costs were based on recent dam construction contract costs in Massachusetts. A factor for contingencies, equal to 15% to 35% of the construction cost, was included to account for items that were not considered at this intensity of study. Engineering and administrative services ranged from 20% to 40% of the construction costs.

Costs for land acquisition were based on an evaluation of current real estate transactions and market conditions. Land with potential for development was valued at from \$1,000 to \$10,000 per acre; land with little development potential was valued at from \$200 to \$500 per acre. Land values also varied from site to site based on the proximity to developed areas and highways, development taking place in the area, and suitability for development. Land needed for the dam, spillway and design high water pool was included in the land acquisition cost.

Cost estimates are presented on the basis of a cost per acre-foot of storage and cost per surface-acre to provide a comparison between different sites and different levels of development at the same site. Costs are preliminary estimates; firm cost estimates for any site can be determined only after completion of detailed geologic and engineering investigations, final structural designs, and land appraisals.

No cost estimates are included for existing reservoirs.

REPORT FORMAT

The report is divided into sections based on the six subwatersheds in the Hudson Study Area. The location map, placed after the Table of Contents, outlines the area covered by each subwatershed.

A Municipal Index has been prepared to enable local residents to more easily locate sites within their town.

The Municipal Index of Sites lists the site identification numbers for potential and existing reservoir sites within each municipality and the page number of this report on which data are recorded.

Each subwatershed section provides Site Data for the potential and existing reservoir sites, located within the subwatershed, which are included in this report.

Potential Reservoir Sites

Data for potential reservoirs are presented in the following format:

Location: include a narrative description of the location of the site by reference to nearby roads, railroads, or other physical landmarks. In addition, the latitude, longitude, and USGS quadrangle sheet name are provided for more accurate location.

Facilities Affected:

describes any man-made facilities that would be flooded by a reservoir at the potential site. The elevation of existing facilities was estimated during the engineer's field reconnaissance with the aid of the USGS quadrangle sheets.

Geologic

provides a summary of the preliminary geologic report. The Conditions: material in the abutments (the valley sides) and the foundation (the valley floor) is described. An estimate is made of the depth and probable type of bedrock. The availability of fill material for dam construction is noted.

> Possible leakage problems are indicated and the waterholding capability of the site is subjectively described as "good," "fair," or "poor." The waterholding capability statement is based on the geologist's interpretation of the surficial conditions observed during the field reconnaissance.

Engineering Notes:

provides information which should be helpful in preliminary design of a dam. One of the abutments is recommended as the location for an excavated emergency spillway. If an excavated emergency spillway is unable to carry the required flows at safe velocity, the need for a concrete emergency spillway is noted.

Public Ownership:

indicates that some portion of a reservoir site is located on land owned by a governmental or quasi-public unit.

Sites which meet study criteria have been analyzed using a computer program which develops preliminary structure site analyses for several levels of development. Results of the computer program are presented in the tables entitled, "Summary Data for Potential Upstream Reservoir Sites" at the end of each subwatershed section. Two information lines contain data on site drainage area, USGS quadrangle name on which the site is located, latitude and longitude of the site, site rating, stream water quality, and principal spillway design storm runoff and peak flow. The site rating is based on geologic conditions and the expected waterholding capability. Sites are given one of the following ratings:

1. Suited for deep permanent storage (over 10 feet in depth).

2. Best suited for shallow water storage (3 to 5 feet maximum depth).

3. Best suited for temporary storage (e.g., floodwater and sediment storage).

In order to furnish the most data for potential reservoir sites, each site was considered to be suitable for deep permanent storage (rating "1") for purposes of design and analyses. The rating for any site could change based on detailed geologic investigations.

Stream water quality ratings are based on classifications assigned by the Division of Water Pollution Control, Massachusetts Water Resources Commission, and published in "Water Quality Standard," June 1967, and are as follows:

- "Class A -- Waters designated for use as public water supply in accordance with Chapter 111 of the General Laws. Character uniformly excellent.
- Class B -- Suitable for bathing and recreational purpose including water contact sports. Acceptable for public water supply with appropriate treatment.

 Suitable for agricultural, and certain industrial cooling and process uses; excellent fish and wildlife habitat; excellent aesthetic value.
- Class C -- Suitable for recreational boating; habitat for wildlife and common food and game fishes indigenous to the region; certain industrial cooling and process uses; under some conditions acceptable for public water supply with appropriate treatment. Suitable for irrigation of crops used for consumption after cooking. Good aesthetic value.
- Class D -- Suitable for aesthetic enjoyment, power, navigation, and certain industrial cooling and process uses. Class "D".waters will be assigned only where a higher water use class cannot be attained after all appropriate waste treatment methods are utilized."

The Summary Data for Potential Upstream Reservoir Sites tables also contain data for as many as six possible levels of development at each site. Elevations of the beneficial pool, emergency spillway crest, design high water, and top of dam are shown along with pertinent storage volumes, surface areas and depths. Total cost expressed in dollars per acre-foot of storage and dollars per surface-acre are provided to aid in comparison of levels of development. The emergency spillway type which was used in the preliminary design is indicated by an emergency spillway type code explained in the table notes.

These tables are photo-reductions of the computer output sheets. Elevations are shown to the tenth of a foot and costs to the nearest \$10, but are not to be considered that accurate because of the limited investigations made with preliminary data. All the Summary Data Tables are based on preliminary reconnaissance-type investigations and computer-produced structure designs. Additional detailed engineering, geologic and design investigations must be made before final site selection, land acquisition and final design would be practical.

Estimated safe yields for each potential reservoir are also shown on the tables and were based on information extrapolated from data developed by the late Professor G. R. Higgins of the University of Massachusetts. These estimated safe yields are based on a 95% chance, or the minimum yield that could be expected 19 years out of 20 -- taking into consideration reservoir storage-volume and expected runoff. These data do not consider evaporation, seepage, or prior upstream commitments.

The Committee on Rainfall and Yield of Drainage Areas of the New England Water Works Association has recommended a figure of 600,000 gallons per day per square mile as a maximum economically feasible safe yield. Data for some of the potential sites in this report show a safe yield above 600,000 gallons per square mile per day. These higher values are useful to define the upper portion of a discharge-storage curve for preliminary analysis. For detailed evaluation of a potential site or water supply purposes, the recommendation of the New England Water Works Association should be considered.

Existing Reservoirs

Data for existing reservoirs are presented in the following format:

Location:

of the dam is indicated by reference to nearby roads, rail-roads, or other physical landmarks. The appropriate USGS quadrangle sheet, latitude, and longitude are provided for more accurate location.

Physical data (reservoir area, surface area, height of dam, and drainage area) were estimated from the quadrangle sheet and by field reconnaissance.

Potential for

Expansion:

is estimated and any major man-made facilities which would be affected by an enlarged reservoir are noted. Some of the site narratives contain the phrase, "Significant expansion does not appear practical." The phrase is used to indicate that although the reservoir level might be raised by a few feet or the reservoir area increased by a few acres, any greater expansion does not appear feasible due to topography or facilities which would be flooded.

In some instances, the drainage area of the reservoir does not meet the criteria requiring a 10 to 1 drainage area to reservoir area ratio, below which there may be relatively high evaporation losses. An increase in reservoir surface area might increase evaporation losses to a point where the reservoir could not be maintained during the summer months. These situations are indicated by the statement, "The small drainage area limits expansion potential."

Remarks:

includes a description of the dam and spillway system. Construction materials, spillway type and size, and condition of the structure are noted.

Ownership

and

Use: is indicated, if available. In some cases, the reservoir is not maintained for a specific purpose, but may have incidental use for recreation. This is probably the situation for existing reservoirs which are indicated in the Massachusetts Department of Public Works records as being used to "store water."

Typical of these sites are old mill reservoirs which are no

longer utilized for mill power.

Selected photographs of existing dams, spillways, and reservoirs are included in the report.

MAPS

Individual subwatershed maps appearing at the end of each section indicate the location of the potential and existing reservoir sites in that subwatershed. The maps are reductions of mosaics prepared from 7½ minute USGS quadrangle sheets (1" = 2000' scale). The quadrangle sheets used and publication dates are listed on the maps. Potential sites are indicated with a red rectangle surrounding the site number. Existing reservoirs are identified by a red circle surrounding the site number.

HUDSON STUDY AREA

SITE DATA FOR

Subwatershed HU-01, Hoosic River

This subwatershed includes the drainage area of the Hoosic River upstream from the USGS stream gage located east of Route 8 in Adams, Massachusetts. The subwatershed covers about 30,000 acres in Adams, Cheshire, Dalton, Lanesborough, New Ashford, Pittsfield, Savoy, and Windsor; all in Berkshire County.

The major stream in the subwatershed is the Hoosic River which originates at Cheshire Reservoir and flows north to the subwatershed limit at the stream gage in Adams. The main tributary streams are Dry Brook, McDonald Brook, Kitchen Brook, and Bassett Brook.

Elevations in the subwatershed range from 3,240 feet in the Mount Grey-lock State Reservation to 850 feet at the USGS stream gage in Adams.

Twelve potential reservoir sites and two existing reservoirs were studied.

POTENTIAL SITE HU-0101

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On an unnamed tributary to Dry Brook, between Wells Road and Harbor Road, about 1300 feet upstream from its confluence with Dry Brook in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°35'37" Longitude: 73°07'30"

Facilities	Facility	Elevation
Affected:	Wells Road and utilities	1125
	Harbor Road and utilities	1 138
	Mobile home and garage	1145
	2 houses	1145
	2 houses	1 150

Geologic Conditions:

The right abutment is glacial outwash underlain by limestone. The left abutment is glacial till with some gravels. The valley floor is glacial outwash. Depth to limestone bedrock in the foundation is estimated to be about 15 to 20 feet. Waterholding capabilities appear to be fair. Borrow material for dam construction was located near the site.

Engineering Notes:

The left abutment is recommended for the excavated emergency spillway location.

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Location:

On Penniman Brook about 1600 feet upstream from North Street (State Route 8), in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°35'00" Longitude: 73°09'12"

Facilities Affected:

Facility
Underground gas line

Elevation 1065

Geologic Conditions:

Both abutments are poorly graded sand and gravel (glacial outwash terrace deposits) and shallow to schist or limestone bedrock. The valley floor is filled sediments, and swampy in the foundation area. Depth to schist bedrock in the foundation is estimated to be about 10 to 15 feet. Water-holding capabilities appear to be good. Borrow material for dam construction was located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0103

Location:

On Dry Brook at Sand Mill Road in Cheshire, Massachusetts.

Windsor, Mass. USGS quadrangle

Latitude: 42°35'08" Longitude: 73°06'38"

Facilities Affected:

racility		Elevation
Sand Mill Road ar	nd utilities	1168
2 houses		1190
House, 3 barns		1195
2 houses		1200
House		1210
House		1215
5 mobile homes	•	1220

Geologic
Conditions:

Both abutments are glacial till underlain by schistose bedrock. Bedrock is exposed in the valley floor. Waterholding capabilities appear to be good. There may be some seepage through sand and gravel deposits in the right abutment. Borrow material for dam construction was located near the site.

Engineering Notes:

The left abutment is recommended for the excavated emergency spillway location. Preliminary structure designs indicate that a concrete chute emergency spillway may also be required at this site.

Location: On Thunder Brook about 10

On Thunder Brook about 1050 feet downstream from Lanesboro Mountain Road in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°33'48" Longitude: 73°10'55"

Facilities Affected:	Facility House	Elevation 1320
	Lanesboro Mountain Road	1320
	West Mountain Road and	
	utilities	1325
	2 houses, 2 barns	1330 `
	Mobile home	1330
	House	1350
Geologic	Dairy barn	1355

Conditions:

The left abutment is stratified sand and gravel with some thin silt lenses and bedrock. The right abutment is glacial till with bedrock at higher elevations. Schist bedrock is just below the surface in the valley floor. Waterholding capabilities appear to be good with possible seepage through the left abutment. Borrow material for dam construction was located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0105

Location:

On McDonald Brook about 6900 feet upstream from its confluence with South Brook in Cheshire, Massachusetts.

Windsor, Mass. USGS quadrangle

Latitude: 42°33'24" Longitude: 73°07'15"

Facilities	Facility	Elevation
Affected:	Barn	1290
	Windsor Road	1305
	Garage	1330

Geologic Conditions:

The left abutment is hard, moderately fractured, tight Cheshire quartzite. The right abutment is silty sand with gravel, cobbles and a few large boulders with a gravel terrace adjacent to the brook. Depth to Cheshire quartzite bedrock in the foundation is estimated to be about 10 feet. Waterholding capabilities appear to be fair to good with possible leakage through the terrace gravels. Borrow material for dam construction was located near the site.

Engineering 'Notes:

The right abutment is recommended for the excavated emergency spillway location. Preliminary structure designs indicate that a concrete chute emergency spillway may also be required at this site.

Location: On Dry Brook about 6300 feet upstream from Windsor Road in Windsor, Massachusetts.

Windsor, Mass. USGS quadrangle

Latitude: 42°33'18" Longitude: 73°04'45"

Facilities Facility Elevation
Affected: Cottage 1810
House 1815
House 1835

Geologic Both abutments are glacial till. Borrow material for dam Conditions: construction was located near the site. Depth to bedrock in the foundation is estimated to be less than 15 feet. Water-holding capabilities appear to be fair to good. There may be some leakage through the foundation. Borrow material for dam construction was located near the site.

Engineering The left abutment is recommended for the excavated emergency Notes: spillway location.

POTENTIAL SITE HU-0107

Location: On Dry Brook about 7400 feet upstream from Windsor Road in Windsor, Massachusetts.

Windsor, Mass. USGS quadrangle

Latitude: 42°33'14" Longitude: 73°04'32"

Facilities Facility Elevation Affected: House 1835

Geologic The right abutment is schistose bedrock overlain by thin silty conditions: sand. The left abutment is schistose bedrock overlain by silty sand and gravel, cobbles, and boulders. Depth to bedrock in the foundation is estimated to be less than 5 feet. Water-holding capabilities appear to be good. Borrow material for dam construction was located near the site.

Engineering The right abutment is recommended for the excavated emergency Notes: spillway location.

On South Brook about 1075 feet upstream from Notch Road in Location: Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°33'19" Longitude: 73°08'31"

Facilities	Facility	Elevation
Affected:	Notch Road and utilities	1090
	House	1100
	Mobile home	1115
	House	1120
	2 mobile homes	1125
	House and barns	1138
	3 mobile homes	1142
	House	1160
	Mobile home and garage	1163
	House	1170

Geologic Conditions:

The left abutment is Cheshire quartzite overlain by silty sand and gravel (glacial till). The right abutment is sand and gravel (englacial drift). Depth to quartzite bedrock in the foundation is estimated to be about 5 to 10 feet. Waterholding capabilities appear to be fair to good depending on leakage in the right abutment. Borrow material for dam construction was located near the site.

Notes:

Engineering Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

POTENTIAL SITE HU-0109

Location:

On South Brook about 2300 feet upstream from Notch Road in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°32'53" Longitude: 73°08'05"

racilities	racility	Elevation
Affected:	Mobile home and garage	1140
	Notch Road and utilities	1142
	House and garage	1170
	House	1187
	House and barn	1220
	House and barn	1235

POTENTIAL SITE HU-0109 (Continued)

Geologic Conditions:

The left abutment is thin glacial till underlain by Cheshire quartzite. The right abutment is silt and silty clay with gravel, cobbles and boulders. Bedrock is exposed in the valley floor in the foundation area. Waterholding capabilities appear to be good. Borrow material for dam construction was located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location. Preliminary structure designs indicate that a concrete chute emergency spillway may also be required at this site.

POTENTIAL SITE HU-O110

Location:

On Pettibone Brook about 3100 feet upstream from Cheshire Road in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°32'37" Longitude: 73°12'03"

Facilities

Facility

Affected:

None below elevation 1317

Geologic Conditions:

The left abutment is poorly graded sand and gravel with boulders (englacial drift) in discontinuous patches. The right abutment is silty sand with gravel, cobbles and boulders (glacial till) and is shallow to bedrock. Schist bedrock is exposed in both abutments. Schist bedrock outcrops in the streambed. There is a limestone quarry in the pool area. Waterholding capabilities appear to be poor. Leakage is expected through fractured bedrock in the foundation or through cavernous limestones in the pool area. Borrow material for dam construction was located near the site.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

Location: On Muddy Brook about 900 feet upstream from Summer Street

in Lanesborough, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°30'21" Longitude: 73°12'10"

Facilities Facility Elevation

Affected: Swamp Road
Underground gas line 980

Geologic The left abutment at the valley floor is silt and at higher Conditions: elevations is silt underlain by fine sand with thin gravel. The right abutment is silt with some gravel and cobbles.

Probing of the muck and peat in the foundation reveals soft materials to 13 feet. Waterholding capabilities appear to be good. Borrow material for dam construction was located

near the site.

Engineering The left abutment is recommended for the excavated emergency spillway location. The peat material in the foundation is considered too fibrous for displacement and probably would have to be excavated prior to the construction of a dam.

POTENTIAL SITE HU-0112

Location: On an unnamed tributary to Cheshire Reservoir about 600 feet upstream from Gulf Road in Lanesborough, Massachusetts.

Pittsfield East, Mass. USGS quadrangle

Latitude: 42°29'28" Longitude: 73°11'53"

Facilities Facility Elevation
Affected: Gulf Road and utilities 1025
Mobile home 1040
House House and barn 1055

Geologic The left abutment is silty sand with gravel, cobbles and boulders (glacial till). The right abutment is silty sand with gravel, cobbles and boulders (glacial till) with possibly some terrace gravel in the upper 10 feet. The foundations is flood plain deposits about 10 to 15 feet

deep. Waterholding capabilities appear to be good. Borrow material for dam construction was located near the site.

Engineering The left abutment is recommended for the excavated emergency Notes: spillway location.

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

1	* SAFE * YIELD	*PERCENT *PERCENT *CHANCE * (MGD)	LATITUDE 42-35-37 LONGITUDE 73-07-30 RUNDFF = 8.30 IN, PEAK FLOW = 418 CFS	* 0.24 * 0.24 * 0.43 * 0.88 * 0.96	· *****	######################################	
		FILL VOL (1000 CY)	NGI TUDE	82 89 95 131 179 201	LONGITUDE FLOW = FLOW = 9 51 6 40 11 108 8 164 0 290	######################################	
	DAM	HGT FT	PEAK FLOW	41 43 43 52 54	A www.	08 LO 08 LO PEAK FI 56 61 60	
		TOP ELEV (MSL)	JDE 42-35- 8.30 IN.	1141.0 1142.0 1142.8 1147.3 1152.0	UDE 42-35- 8.30 IN, 2.1109.3 8.1105.6 2.1120.5 2.1120.5 4.1139.6	**************************************	
RIVER	N TER *	AREA *	LATITUDE 42-35-37 FF = 8.30 IN. PE.	66 * 70 * 76 * 89 * 100 * 105	111 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	**************************************	
-H0051C	DESIGN HIGH WATER	ELEV (MSL)	RUNOFF	1136.6 1137.9 1139.5 1144.0 1148.4	LA RUNDFF 1104.5 1099.1 1116.1 1124.6 1136.4	LA RUNDFF 1209.1 1216.9 1222.6 1224.6	
SUBMATERSHED-HOOSIC RIVER	* *		GN STORM	850 * 830 * 770 * 670 * 610 * 580	GN STORM 980 * 9840 * 850 * 770 *	# # # # # # # # # # # # # # # # # # #	
SUBM	EMERGENCY SPILLWAY	ST IN	CHESHIRE SPWY DESIGN	505 7.0 560 7.8 651 9.0 993 13.7 1408 19.6	CHESHIRE SPWY DESIGN 309 6.4 107 2.2 605 12.5 896 18.5 456 30.0	*********** -WINDSOR SPWY DESIGN S 158 0.4 1111 323 0.8 80 487 1.2 58 816 2.0 23	ים י
	NCY SF	STORAGE AT CREST AC FT IN	4	505 560 651 993 1408	· 1 —	# 1 - # 4	
***************************************	EMERGE		USGS QUAD- 100-YR PRIN	1134.8 E 1135.8 E 1137.1 E 1141.6 E 1146.4 E	USGS QUAD- 100-YR PRIN 1102-1 E 1089-3 T 1113-8 E 1122-1 E	######################################	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	* *	* * * * F E ~	AC B) 1	84***	B B C C C C C C C C C C C C C C C C C C	B B B B B B B B B B B B B B B B B B B	2010
		DEPT AT DAP (FT)				24 4672 A 1TY (B 32 38 47 47	
NDSON		COST/ SURF AC (\$)	= 1.35 SQ MI = 86 STREAM WATER QUALITY	20100 11580 9840 10320 10600	= 0.91 SQ MI = 58 STREAM WATER QUALITY 3 4120 11 35910 1810 20 26460 1810 20 26460 1870 50 21350	######################################	200
AREA-	OL.	AREA (AC)	35 SQ M WAT	22 43 64 89 89	91 SQ M WATE 111 20 32 32 50	30 SQ M WATE 17 25 31 41	5
STUDY AREA-HUDSON	BENEFICIAL POOL	COST COST COST DEP ELEV STORAGE PER AREA SURF AT AC FT AC FT AC DA (MSL) AC FT IN (\$) (AC) (\$)	SITE-HU-0101 DA= 1.35 SQ MI = 864 SITE RATING (1) STREAM WATER QUALITY (1110.8 0 0.0 2 101125.3 100 1.4 4670 23 20100 25 1130.6 280 3.9 1790 43 11580 30 1137.1 640 8.8 1040 67 9840 37 1141.9 1001 13.8 860 83 10320 41 1144.0 1181 16.4 800 89 10600 44	DA= 0.91 SQ MI = STREAM WATER QU = 3 4120 11 359 1810 20 2640 1050 32 214 870 50 213	\$\sum_{\pi=\pi=\pi=\pi=\pi=\pi=\pi=\pi=\pi=\pi=	וב מאסבט
	BENEF	STORAGE FT IN	3	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(1) 0.0 2.0 5.9 13.5	(1) 0.3 0.7 1.1 1.9	2 1
•		STOR AC FT	TE-HU-0101 SITE RATING	0 100 280 280 640 1001 1181	TE-HU-0102 SITE RATING 74.9 0 89.3 100 01.3 286 15.6 657 29.6 1213	######################################	7 1
1		ELEV (MSL)	SITE RATIN	1110.8 1125.3 1130.6 1137.1 1141.9	SITE-HU-0102 SITE RATIN 1074.9 1089.3 10 1101.3 28 1115.6 65 1129.6 121	SITE-HU-0103 SITE RATIN 1194.8 10 1202.6 26 1208.5 42 1217.6 75	27-01

CUSIS ARE BASED UN 1974 S.C.S. DESIGN CRITERIA AND COST DATA.

EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. EMERGENCY SPILLWAY TYPE CODE- C*CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONE 2633

TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

* * *	* CREST STORAGE COST * * ELEV AT CREST PER * *+ TYPE AC FT * * (MSL) AC FT IN (\$) *	\$8\frac{8\	**************************************	2 12.2 * 1320.5 E 509 7.3 1630 * 1322.9 28 * 1328.9 69 267 * * * 4520 16 68260 48.5 * 1308.5 T 110 1.6 8330 * 1308.4 16 * 1313.6 54 133 * 4520 16 68260 48.5 * 1308.5 T 255 3.5 4330 * 1319.3 25 * 1324.1 64 220 * 2690 27 52870 61.6 * 1321.6 T 543 7.8 2640 * 1331.1 35 * 1336.6 77 357 * 1850 35 43510 71.0 * 1331.0 T 832 11.8 1820 * 1336.6 39 * 1339.9 80 400 * 1780 36 42990 72.5 * 1332.5 T 883 12.6 1750 * 1337.1 40 * 1340.1 80 405 *	DA= 2.00 SQ MI = 1280 AC USGS QUAD-WINDSOR STREAM WATER QUALITY (B) 100-YR PRIN SPWY DESIGN STORM R	######################################
STUDY AREA-H ************************************	COST PER AREA AC FT (AC)	1	DA= 1.31 SQ STREAM WATE	2 9210 8 4520 16 2690 27 1850 35	DA= 2.00 SQ STREAM WATE	5890 22 1010 61 500 98 430 132
**************************************	ELEV STORAGE (MSL) AC FT IN	**************************************	**************************************		SITE-HU-0106 SITE RATING (1)	1810.6 0 0.0 1824.1 100 0.8 1834.6 528 4.9 1845.1 1383 13.0 1856.3 2667 25.0

CONSIDERED ACCURATE TO THAT DEGREE.

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(4)

SUBWATERSHED-HOOSIC RIVER	* CREST STORAGE COST * * ELEV AT CREST PER * *+ TYPE AC FT * * (MSL) AC FT IN (\$) *	**************************************	430 85 6880 31.2 * 1853.8 E 1780 23.7 330 * 1856.0 99 * 1859.8 42 10.2 * 1.0.05 450 91 80.20 34.0 * 1852.1 T 16.28 21.7 450 * 1856.8 10.1 * 1860.0 42 10.4 * 1.1.2 * 1.2.12 *	* 1150-1 T 1543 4-1 2150 * * 1109-1 T 156 0-4 9820 * * 1135-4 T 797 2-0 4380 * * 1157-6 T 2080 5-6 1980 * * 1172-5 T 3643 9-8 960 * *	**************************************	15540 14 112910 24.1 * 1164.1 T 134 0.6 11630 * 1178.3 33 * 1187.0 47 113 3150 49 57820 49.9 * 1189.9 T 934 4.1 3030 * 1203.4 70 * 1212.4 72 47 47 11610 89 44920 73.6 * 1213.6 T 2534 11.3 1590 * 1226.9 117 * 1237.0 97 117 950 130 33360 92.5 * 1232.5 T 4605 20.6 940 * 1236.9 140 * 1240.0 100 128 * * * * * * * * * * * * * * * * * * *
STUDY AREA-HL ************************************	COST PER AREA AC FT (AC)	**************************************	430 85 450 91 ************************************	11 15290 15 1 4710 39 2040 79 980 137	**************************************	15540 14 1 3150 49 1610 89 950 130
**************************************	ELEV STORAGE (MSL) AC FT IN	SITE HU-0107 SITE RATING (1) 1821.5 0 0.0 1827.8 100 1.2 1834.6 353 4.6 1842.8 858 11.3	1849.3 1364 18.1 1852.1 1617 21.5 ************************************	1101.3 0 0.0 1109.1 1C0 0.3 1135.4 741 2.0 1157.6 2024 5.4 1172.5 3587 9.7	SITE RATING (1) 1152.6 0 0.0	1164.1 1C0 0.4 1189.9 9C0 4.0 1213.6 2501 11.2 1232.5 4571 20.4 ************************************

EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONE TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE. ** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

(3)

SUBMATERSHED-HOOSIC RIVER ********************************** FREENCY SPILLWAY * DESIGN * DAM * * *****************************	CREST CREST ELEV H TYPE	SITE-HU-0110 DA= 1.93 SQ MI = 1235 AC USGS QUAD-CHESHIRE SITE RATING (3) STREAM WATER QUALITY (B) 100-YR PRIN SPWY DESIGN STORM RUNDFF = 8.30 IN, PEAK FLOW = 597 CFS	14.3 * 1309.3 T 427 4.1 2000 * 1314.4 35 * 1319.8 64 76 * ***** 40 34.8 * 1290.8 T 115 1.1 7730 * 1302.6 18 * 1308.4 52 48 * 0.28 50 41.9 * 1297.9 T 198 1.9 5270 * 1312.4 32 * 1318.8 63 73 * 0.40 40 50.8 * 1306.8 T 362 3.5 2420 * 1314.8 36 * 1319.4 63 74 * 0.58 60 56.5 * 1312.5 T 523 5.1 1880 * 1317.1 39 * 1320.1 64 77 * 0.72	**************************************	973.5 0 0.0 12 1.5 * 983.8 E 548 6.0 570 * 986.0 108 * 990.0 18 34 * * * * * * * * * * * * * * * * * *	USGS QUAD-PITTSFIELD EAST LATITUDE 42-29-28 LONGITUDE 100-YR PRIN SPWY DESIGN STORM RUNDFF = 8.30 IN, PEAK FLOM =	0 0.0 4 3.0 * 1041.3 E 321 6.3 1130 * 1043.6 32 * 1047.6 28 67 * * * * * * * * * * * * * * * * * *	GN CRITERIA AND COST DATA. S ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. CRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS,
D-H00SI ******** * DESI	***** * ELEV * (MSL)	M R UNO	# 1314-4 # 1302-4 # 1312-4 # 1317-1	**************************************	986.1 986.1 989.6 991.4	RUNO	1043. 1047. 1051. 1066.	INCLUD!
ATER SHE	****** COST PER AC FT	GN STOR	2000 7730 5270 2420 1880	ii ~ "		- W		ATA. TORAGE, E DROP,
SUBW *****	#**** GE EST IN	SHIRE Y DESI		***** SHIRE Y DESI	6.0 6.0 8.5 9.8 13.2	TSFIEL Y DESI	6.3 8.5 11.6 19.6 26.2 24.1	COST D OTAL S ONCRET
*****	STORA STORA AT CR AC FT	JAD-CHE		JAD-CHE	-	JAD-PIT		40
*******				****** USGS QU 00-YR PR		•	1041.3 E 1044.9 E 1049.1 E 1058.1 E 1062.5 I E 1062.5 E 1	CRITERI ARE BASE ETE CHUI
* * *		-	* * * * * *	****** AC (B) 1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AC (B) 1		DESIGN COSTS =CONCR
* * * * * * * * * * * * * * * * * * * *	/*************************************	1235 1L I T Y		1094 1117	00000	608 11 1 T Y	0000	C.S. AND DDE-C
STUDY AREA-HUDSON ************************************	****** COST/ SURF AC (\$)	MI = ER QU/	92940 76950 35840 30360	***** MI = ER QU/	8590 7150 5860 5370 5200	MI = ER QU/	27300 19940 20040 20040 21740	974 S. TORAGE YPE CC
AREA-	AREA (AC)	93 SQ	10 14 14 32	71 SQ	12 42 59 83 101 109	95 SQ	4 L 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	MAY S
STUDY AR ************************************	COST PER AC FT (\$)	DA= 1. STRE	8920 5720 2530 1940	**************************************	3580 2000 1110 820 730	DA= 0.95 SQ MI = STREAM WATER QUAI	4720 1980 1230 990 990	E BASED ON Y SPILLWAY
*****	**** AGE IN	(3)	0.0 1.0 1.7 3.4	******	0.0 1.2 2.3 4.8 8.3	(3)	0.0 2.0 5.8 13.5 21.2 23.9	COSTS ARE EMERGENCY
*	********* STORAGE AC FT I	TE-HU-0110	100 182 182 347 508	********** TE-HU-0111 SITE RATING	0 100 213 438 663 775	TE-HU-0112 SITE RATING	0 100 294 683 1072 1213	(1) CO (2) EM (3) EM
**	#***** ELEV (MSL)	SITE-HU-0110 SITE RATING	1270.4 1290.8 1297.9 1306.8	**************************************	973.5 977.3 979.5 982.5 985.0	SITE-HU-0112 SITE RATIN	1023.0 1032.4 1040.6 1051.6 1059.9	NOTES -

(4) TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES.
(5) ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE.

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EXISTING SITE HU-0120 (Cheshire Reservoir)

Location:

On the Hoosic River at South Street (State Route 8) in Cheshire, Massachusetts.

Cheshire, Mass. USGS quadrangle

Surface Elevation 970 Surface Area
(Acres)

Height of Dam (Ft.)

Drainage Area (Acres) (Sq. Mi.) 9550 14.9

Potential for Expansion:

Limited. The reservoir is surrounded by many houses and cottages.

Remarks:

The dam is a 40-foot long stone masonry weir having a maximum head of 3 feet. A catwalk traverses the weir and there are 4 gated outlet pipes. The weir has been recently repaired. The dam is well maintained.

Ownership and Use:

The reservoir is owned by Arnold Print Works Inc. of Adams and is primarily used for industrial processing water.

EXISTING SITE HU-0121 (Berkshire Pond)

Location:

On an unnamed tributary to Cheshire Pond about 50 feet downstream from Old State Road in Lanesborough, Massachusetts.

Cheshire, Mass. USGS quadrangle

Surface Elevation 987 Surface Area
(Acres)
20

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq. Mi.)
1100 1.7

Potential for Expansion:

Topography limits any significant increase in surface area. The eastern edge of the pond is bordered by the New York Central Railroad and State Route 8.

Remarks:

The dam is an old earthfill structure about 50 feet long with a vegetated spillway on the left abutment. A gate-house is located on the right abutment near the toe of the dam.

Ownership and Use:

The pond is owned by Arnold Print Works Inc. and is primarily used for industrial processing water.

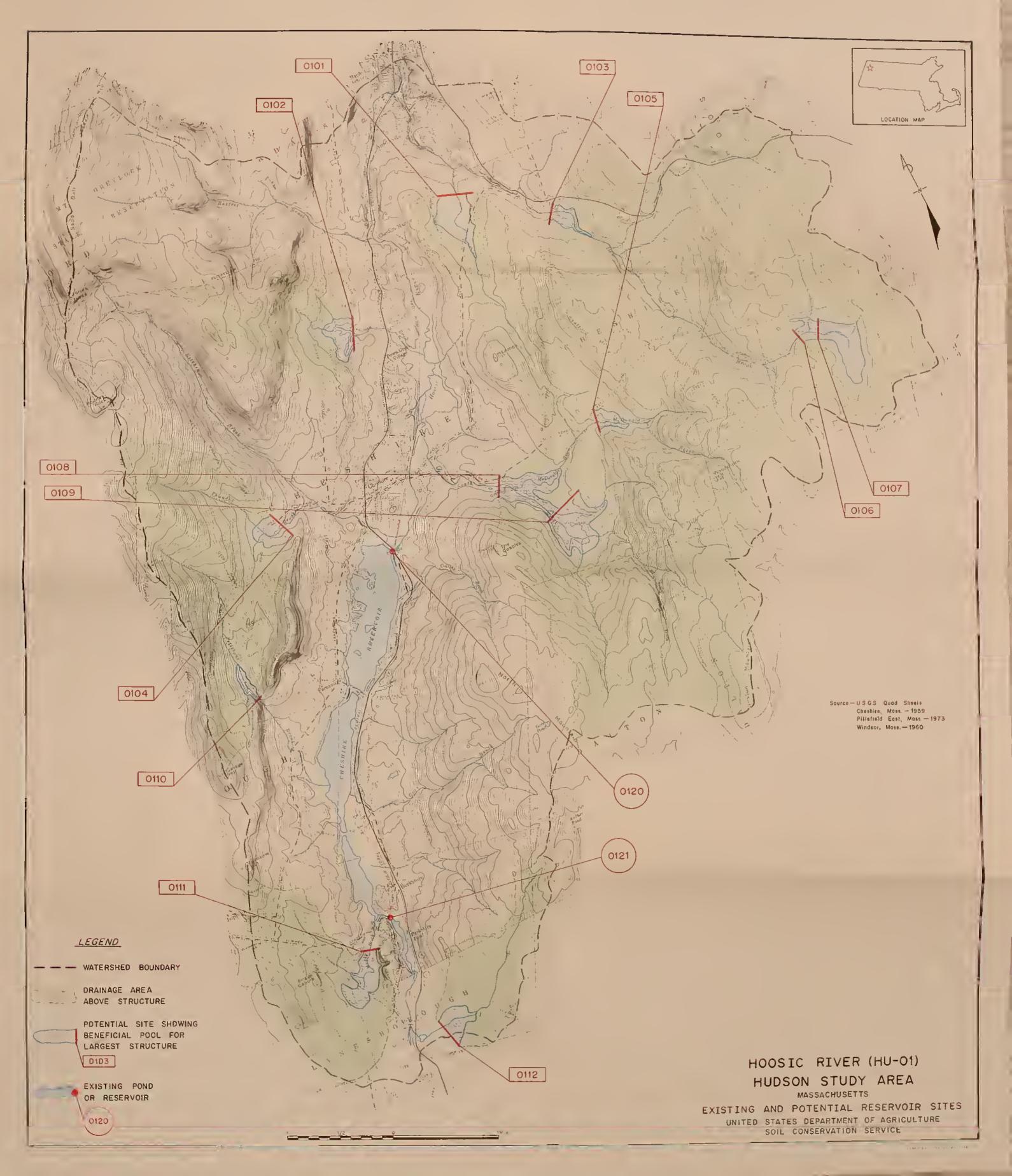


HU-0120 CHESHIRE RESERVOIR



HU-0121 BERKSHIRE POND







HUDSON STUDY AREA

SITE DATA FOR

Subwatershed HU-02, Hoosic River

This subwatershed includes the drainage area of the Hoosic River from the USGS stream gage located east of Route 8 in Adams, Massachusetts downstream to the Vermont state line in Williamstown. The subwatershed covers about 46,200 acres in Adams, Cheshire, Clarksburg, Florida, New Ashford, North Adams, Savoy, and Williamstown; all in Berkshire County.

The major stream in the subwatershed is the Hoosic River. The river flows north from the USGS stream gage to North Adams where it turns and flows northwesterly to Vermont. The main tributary streams are the North Branch of the Hoosic, Notch Brook and Hemlock Brook.

Elevations in the subwatershed range from a high of 3,490 feet at Mount Greylock in Adams to about 570 feet at the Vermont line in Williamstown.

Four potential reservoir sites and nine existing reservoirs were studied.

POTENTIAL SITE HU-0201

Location:

On Birch Brook about 2500 feet upstream from its confluence with Buxton Brook in Williamstown, Massachusetts

Williamstown, Mass.-Vt. USGS quadrangle

Latitude: 42°31'00" Longitude: 73°14'12"

Facilities

Facility

None below elevation 997 Affected:

Geologic Conditions: Both abutments are thin ground moraine consisting of soft shale and limey shale and underlain by limey shale and limestone. Depth to bedrock in the foundation is estimated to be about 10 to 15 feet. Waterholding capabilities appear to be poor. Leakage is expected in the limestone and limey shale. Borrow material for dam construction was located near the site, however the quality of the material is questionable because of the soft shale particles that may break up under compaction.

Notes:

Engineering Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

On Beaver Creek about 725 feet upstream from Horrigan Road Location: in Clarksburg, Massachusetts.

North Adams, Mass.-Vt. USGS quadrangle

Latitude: 42°43'46" Longitude: 73°05'32"

Elevation Facilities Facility 1150 Affected: House 1155 House'

Both abutments are thin glacial till or morainal deposits Geologic underlain by limestone. Depth to limestone bedrock in the Conditions: foundation is estimated to be about 15 to 25 feet. Waterholding capabilities appear to be good. Borrow material for

dam construction was located near the site.

Preliminary structure designs indicate that a concrete chute Engineering emergency spillway may be required at this site. Notes:

POTENTIAL SITE HU-0204

Location: On Notch Brook about 600 feet upstream from West Mountain Road in North Adams, Massachusetts

Williamstown, Mass.-Vt. USGS quadrangle

Latitude: 42°40'20" Longitude: 73°08'10"

Facilities Facility Elevation Affected: House 1200 1200 Dog kennels

The left abutment is glacial till or outwash gravel. The right Geologic Conditions: abutment is schist bedrock with limestone. Waterholding capabilities appear to be fair to good. Some leakage is possible through the left abutment. Borrow material for dam construction was located near the site. Please refer to Existing Site HU-0204

(Notch Reservoir) for information on the existing reservoir

at this site.

Engineering Preliminary structure designs indicate that a concrete chute Notes: emergency spillway may be required at this site.

Public The existing reservoir is owned by the city of North Adams. Ownership:

Location: On Tophet Brook about 600 feet upstream from Center Road in

Savoy, Massachusetts

Windsor, Mass. USGS quadrangle

Latitude: 42°37'06" Longitude: 73°03'56"

Facilities
Affected:

Facility

None below elevation 2100

Geologic Conditions:

Both abutments are thin glacial till underlain by gneiss bedrock. Depth to gneiss bedrock in the foundation is estimated to be about 5 to 10 feet. Surficial deposits are valley fill, glacial till and gneiss bedrock. Waterholding capabilities appear to be good. Borrow material for dam construction was

located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location. There are remnants of an old rock and earthfill dam and an old beaver dam at the site.

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

STUDY AREA	SUBWATERSHED-HOOSIC RIVER	EMERGENCY SPILLWAY * DESIGN * DAM * HIGH WATER *	CREST STORAGE COST * ELEV AT CREST PER * + TYPE AC FT IN (\$) *	FIRET WATER QUALITY (B) 100-YR PRIN SPWY DESIGN STORM RUNDFF = 8.30 IN. PEAK FLOW = 514 CFS	968.8 T 367 4.1 3900 * 977.0 21 * 985.9 948.4 T 113 1.2 8890 * 960.0 13 * 965.8 962.0 T 264 3.0 5540 * 976.6 21 * 983.0 978.8 T 567 6.4 3310 * 991.1 31 * 997.5 990.3 T 869 9.8 2110 * 996.5 35 * 999.8 992.5 T 937 10.6 2070 * 997.1 36 * 1000.1	USGS QUAD-NORTH ADAMS LATITUDE 100-YR PRIN SPWY DESIGN STURM RUNOFF = 8.3 1151.6 T 325 4.1 1790 * 1155.6 54 * 1144.6 T 112 1.4 5190 * 1155.8 55 * 1147.1 T 174 2.2 3490 * 1155.8 55 * 1169.1 T 235 3.0 2640 * 1155.5 56 * 1152.4 T 359 4.6 1970 * 1157.3 59 * 1152.5 T 362 4.6 1960 * 1157.3 59 *	COSTS ARE BASED ON 1974 S.C.S. DESIGN CRITERIA AND COST DATA. EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONL TABLIAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES.
			+ •	*		* 0	S.C.S. DESIGN COSTS ARE CODE — C=CONCRETE IN PRELIMINARY IN THE MENDER OF THE MENDER O
######################################	STUDY AREA-HUDS	CIAL POOL	COST CC PER AREA SU AC FT (AC) (DA= 1.66 SQ MI STREAM WATER Q	10070 8 125 5830 14 105 3390 22 83 2140 31 60 2090 32 60	DA= 1.47 SQ MI STREAM WATER G 5800 21 27 3740 28 21 2780 34 18 2040 44 16	E BASED ON 1974 Y SPILLMAY TYPE DATA ARE BASED O
######################################		BENEFIC	ELEV STORAGE (MSL) AC FT IN	SITE-HU-0201 SITE RATING (3)	925.9 0 0.0 948.4 100 1.1 962.0 251 2.8 978.8 554 6.3 990.3 856 9.7	SITE-HU-0202 SITE RATING (1) 1135.1 0 0.0 1144.6 100 1.2 1147.1 162 2.0 1149.1 224 2.9 1152.4 347 4.4	(2) COSTS ARE (2) EMERGENCY (3) EMERGENCY (4) TABULAR D

** DO NOT'USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

***	SAFE	* AT 95	*PERCENT *CHANCE	(WGD)	******** 73-08-10 684 CFS	**	95.0	0.10	1.13	1.17	73-03-56	189 CFS		***	0.17	0.21	0.30	0.34	4	H H H			ro 8E
. 4	× *	A **	*PE!	* *	**** E 73-	* *	*	* *	*	*	H-		*	*	*	*	*	*	*	H H H		NONE	NOT
***		*****	FILL	CY)	************ D LONGITUDE 73-08-10 EAK FLOW = 684 CFS	244	382	489	702	707	NGITUD	= MO1		46	09	4	84	83	4			YS, N=	AND ARE NOT TO
***	DAM	****	HGT	FT	* 4	9.1	80	87	100	100	***** 36 LO	PEAK FI					33	33	4	# # # #	P001.	PILLWA	Y AN AN
		****	TOP ELEV	(MSL)	**************************************	1281.0	1269.9	1277.5	1289.9	1290.1	************** LATITUDE 42-37-06 LONGITUDE	8.30 IN, PEAK FLOW		2097.3	2099.7	2102.5	2103.1	2103.0		***	ICIAL		NTS ON
2 H	* *	*	* * •	* *	JDE 8-3	* *	*	* *	*	*	JDE	8.3	*	#	*	*	*	*			NEF	ŭ	JP ME
RIVE	N L	* * *	AREA	(AC)	* 1 1 1	26	57	27	, w	36	TIT	#		5	7	m	34	Å	4		96 91	TED	VEL
SUBWATER SHED-HOOSIC RIVER	DESIGN HIGH WATER	*****	ELEV	(MSL)	**************************************	1270-1	1263.6	1271.1	1286.5	1287.1	LA	RUNDFF		2093.8	2096.7	2099.3	2099.7	2100.0	4 4 4 4	# # # #	INCLUDING BENEFICIAL POOL.	E=EXCAVATED, T= TWO SPILLWAYS, N= NON	FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY.
4ED-	* *	* * *	**	* *	# # W	* *	*	* *	*	*		DRM	*	*	*	*	*	*	*				w
ATERSH	>	****	COST	(\$)	**************************************	5010	5980	4690	2590	2500		GN STORM			1560			1950	4	AND COST DATA	ON TOTAL STORAGE,	NOCRETE CHUTE, D=CONCRETE DROP,	ATION
SUBM	EMERGENCY SPILLWAY	***	J	Z	######################################	4.1	2.7	3.9	8.7	9.2	O.R	DES 1GN		5.4	7.3	9.8	7.8	0.1	4	AU TOU ON	AL S	CRET	VARI
4	SPI	*****	STORAGE AT CREST	-	**** WILLI SPWY	689	318	58 0	1021	1080	USGS QUAD-WINDSOR	SPWY					257		4		TOT	=C0N	HOM
*	NC Y	***	STO	AC FT	* * * N N N N	4	· m	4 6	10	10	M-QV			~	7	m	2	m	1	t-	O	T O D	
i i	ERG	*			# 02	+	- 0	 - a	9	5 1) O	PRIN			m m		0	2	4	FRI	ASE	HOL	TOT
	ũ	***	CREST	(MSL)	***** USGS 100-YR	1260.6	1251.0	1259.1	1280.6	1282.5	USGS	100-YR		2091.6	2094.3	2097	2095.0	2097.5	4	CRIT	COSTS ARE BASED	TRE	1 10
4	* *	***	* *	* *	*	* *	*	* *	*	*		=	*	*	*	*	*	*	* 1	2	15 /	NCR.	T 0.1
STUDY AREA-HUDSON		泰林市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市安徽市	DEPTH	(FT)	#*************************************	14.6	61.0	69.1	9.06	92.5	**************************************	STREAM WATER QUALITY (B)		4.5	17.7	20.6	25.0	27.5	4	NOTES - (1) COSTS ARE BASED ON 1976 S.C. S. DESTINATION	ND COS	EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, TABLLAR DATA ARE RACED:ON RESIDMINARY INFORMATION FICURES CHOMN	ELEVATIONS ARE SHOWN TO THE NEARES
NO #		***	COST/ SURF	AC (\$)	**** = 1 UALI		910	01200	85740	84050	# # #	UALI			23330	21810	19950	21140	4	+	SPILLWAY STORAGE AND	CODE	THE
HODS		***	COST	A C	# E Z # E Z		137670	101200	85	84	+ Σ	9		1	23	21	19	21	4	74	ORA	/PE	0
STUDY AREA-HUDSON		***	AREA	(AC)	SO WAT	~	14	21	31	32	0.61 SQ MI =	WATE		7	91	20	27	30		- 2	17 ST	AY T	NMOT
)Y AF	P 0 0	***		-	2.2 EAM		0	<u>o</u> c	0	0	0.6	EAM			0	0	0	<u>o</u>	4	L C	LLW	LLW	KE SP
STUE	BENEFICIAL POOL	***	COST	(\$)	***** DA= STR		6330	4880	2630	2540	# # # # O	STR			3760	2930	2100	1980	4	PAA	SPI	SPI	AS AF
1	EF10	***		z	* O * *	0.0	2.5	3.6	8.5	0.6				0.0	3.0	4.6	9.1	10.0	1	COSTS ARE	EMERGENCY	FNCY	TION
*	BEN	***	STORAGE	IN	****							=======================================					•		1	DSTS	MERG	MERG	LEVA
4		***	STO	AC FT	**************************************	C	300	722	1003	1062	SITE-HU-0205	SITE RATING		0	100	151	252	324	4 4	1		(3) E	
*		***		A	# # HU-0	5	0	c		5	10-0	RA		2	8	9	0	2	4	• - • 1			
4		作等外替3	ELEV	(MSL)	**************************************	120426	1251.0	1259.1	1280.6	1282.5	SITE-HU-0205	SIT		2074.5	2087.8	2080.6	2095.0	2097.5	4 4 4	NOTES			
4	•	*			* 5	-					* 5	1		7	7	7	7	2	1	ł Z			

ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO CONSIDERED ACCURATE TO THAT DEGREE. EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL.

EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONE
TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

EXISTING SITE HU-0203 (Mauserts Pond)

Location:

On Beaver Creek about 2000 feet upstream from State Route 8 in Clarksburg, Massachusetts

North Adams, Mass.-Vt. USGS quadrangle

Surface Elevation 1074

Surface Area (Acres)

Height of Dam (Ft.)

Drainage Area (Acres) (Sq. Mi.)

Potential for Expansion: Raising the existing pond level by 10 feet would more than double the surface area. No facilities would be affected.

Remarks:

The dam is a series of earthfill dikes. The spillway system is a concrete ogee weir about 70 feet long having a maximum head of 3 feet. The pond drain is a concrete drop structure with stop logs.

Ownership and Use:

The pond is owned by the Commonwealth of Massachusetts. Department of Environmental Management and is used for recreation.

EXISTING SITE HU-0204 (Notch Reservoir)

Location:

On Notch Brook about 600 feet upstream from West Mountain Road in North Adams, Massachusetts.

Williamstown, Mass-Vt. USGS quadrangle

Surface Elevation 1246

Surface Area

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

1400 2.2

Potential for Expansion: Please refer to Site Data and Design Summary Table for Potential Site HU-0204 for details.

Remarks:

The dam is an earthfill structure about 500 feet long with rock riprap below the waterline on the upstream slope. The principal spillway is a 50-foot long weir on the right abutment with provisions for 2 feet of stop logs.

Ownership and Use:

The reservoir is owned by the city of North Adams and is used for water supply.

EXISTING SITE HU-0210 (Choquettes Pond)

Location:

On an unnamed brook about 2000 feet upstream from State Route 8 in Clarksburg, Massachusetts.

North Adams, Mass.-Vt. USGS quadrangle

Surface Elevation 1105

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

10 50 0.08

Potential for

Expansion is limited by the small drainage area.

Expansion: Remarks:

The structure is a vegetated earthen dam about 100 feet long. The spillway is a 12-inch metal pipe. Dam and spillway are well maintained.

Ownership and Use:

The site is owned by the Commonwealth of Massachusetts, Department of Environmental Management and is used for recreation.

EXISTING SITE HU-0211 (Lower Reservoir)

Location:

About 1 mile southwest of the center of North Adams in North Adams, Massachusetts.

North Adams, Mass.-Vt. USGS quadrangle

Surface Elevation 910

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

Potential for

Expansion:

The site is a bypass pond built on a steep slope with no potential for expansion.

Remarks:

The dam is an earthfill structure about 300 feet long with dikes on all sides of the reservoir. The reservoir was previously used as a storage facility for water from Notch Reservoir but has been abandoned.

Ownership and Use:

The reservoir is owned by the town of North Adams and is no longer used for a specific purpose.

EXISTING SITE HU-0212 (Upper Reservoir)

Location:

About 1 mile southeast of the center of North Adams in North Adams, Massachusetts

North Adams, Mass.-Vt. USGS quadrangle

Surface Elevation 1095

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

20 10 .02

Potential for Expansion: The site is a bypass pond built on a slope with no potential for expansion.

Remarks:

The dam is an earthfill structure about 800 feet long having a vegetated downstream slope and rock riprapped upstream slope. The reservoir stores water which is pumped from Notch Reservoir.

Ownership and Use:

The reservoir is owned by the town of North Adams and is used for water supply.

EXISTING SITE HU-0213 (Windsor Lake)

Location:

On a tributary to the Hoosic River about 2800 feet upstream from Ashland Street (State Route 8) in North Adams, Massachusetts.

North Adams, Mass.-Vt. USGS quadrangle

Surface Elevation 959

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

20 150 0.25

Potential for

Expansion:

The small drainage limits expansion potential. The surface area is already large in relation to the drainage area.

Remarks:

The dam is an earthfill structure about 300 feet long with a 15-foot long, 2-foot maximum head, concrete and stone masonry weir on the right abutment.

Ownership and Use:

The lake is owned by the town of North Adams and is used for recreation.

EXISTING SITE HU-0214 (Williamstown Reservoir)

Location:

About 6000 feet southeast of the intersection of Luce Road and State Route 2 in Williamstown, Massachusetts.

Williamstown, Mass.-Vt. USGS quadrangle

Surface Elevation 975 Surface Area
(Acres)
3

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq. Mi.)
26

Potential for

Expansion:

The site is a bypass pond built on a steep slope with no potential for expansion.

Remarks:

The dam is an earthfill structure about 500 feet long. Both slopes are vegetated and the dam appears to be well maintained. The principal spillway is a 12-inch metal pipe located at the eastern end of the pool. A gatehouse is located on the western end.

Ownership and Use:

The reservoir is owned by the town of Williamstown and is used for water supply.

EXISTING SITE HU-0215 (Mount Williams Reservoir)

Location:

On Paull Brook about 1500 feet upstream from Pattison Road in North Adams, Massachusetts.

Williamstown, Mass.-Vt. USGS quadrangle

Surface Elevation 1044 Surface Area
(Acres)
h8

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq. Mi.)
850 1.3

Potential for Expansion:

Limited; expansion would require extensive diking along the entire north shore of the reservoir.

Remarks:

The dam is an earthfill structure about 500 feet long with rock riprap on the upstream slope. The principal spillway is a 20-foot long concrete chute on the left abutment having a maximum head of 7 feet.

Ownership and Use:

The reservoir is owned by the town of North Adams and is used for water supply.

EXISTING SITE HU-0216 (Dean Pond)

Location:

On Pecks Brook about 5000 feet upstream from West Road in Adams, Massachusetts.

Cheshire, Mass. USGS quadrangle

Surface Elevation 1010 Surface Area (Acres)

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq.Mi.)
1350 2.1

Potential for

Expansion:

Poor; topography limits any significant increase in surface area.

Remarks:

The dam is a stone masonry structure about 100 feet long. The spillway is a 20-foot long weir in the center of the dam with a maximum head of 3 feet and a fall of about 20 feet. A gatehouse is located on the right abutment.

Ownership and Use:

The pond is owned by J. Arnold and is not used for a specific purpose.



HU-0203



HU-0204 NOTCH RESERVOIR





HU-0210 CHOQUETTES POND



HU-0211 LOWER RESERVOIR



HU-0212 UPPER RESERVOIR





HU-0213 WINDSOR LAKE



HU-0214 WILLIAMSTOWN RESERVOIR

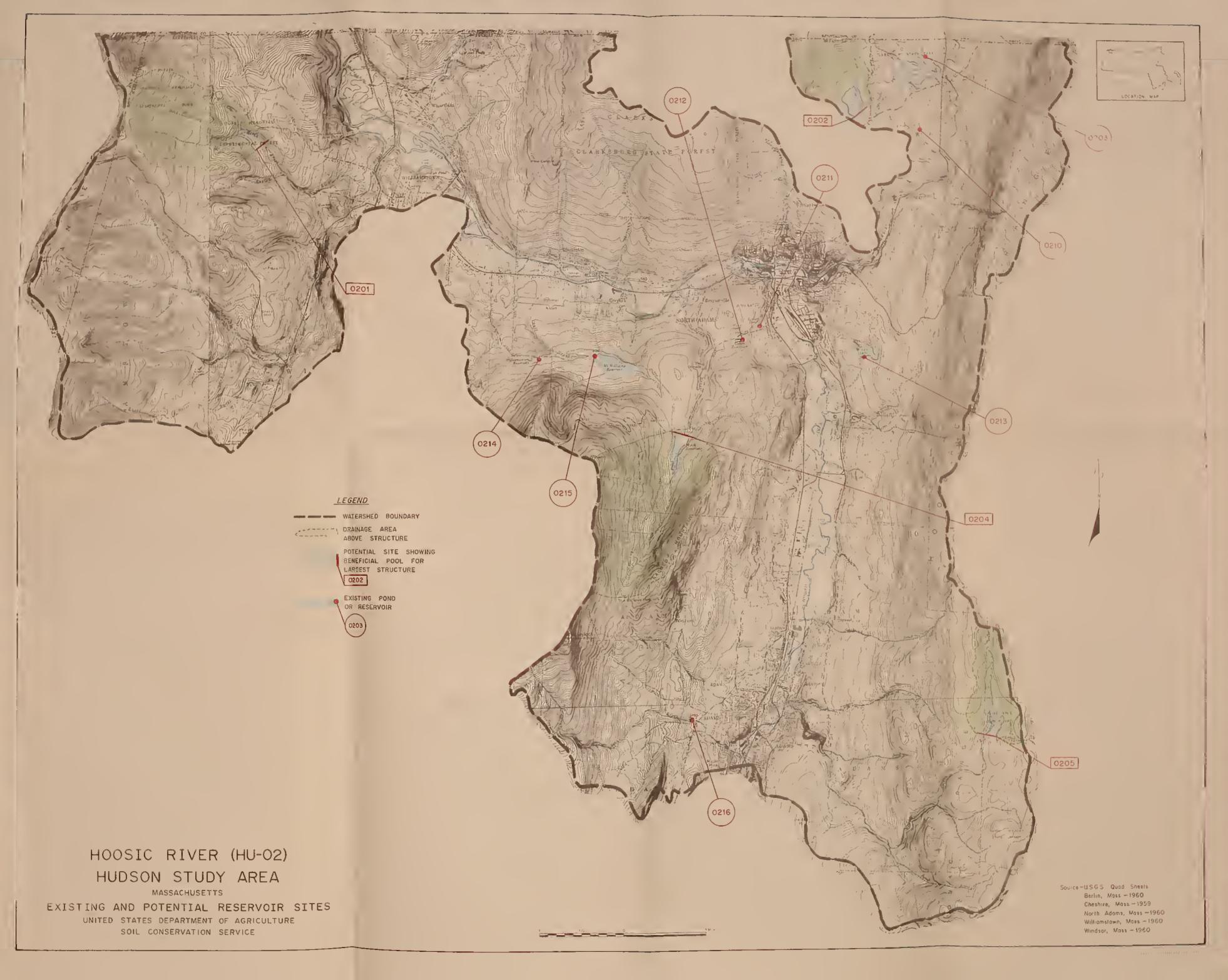


HU-0215 MT. WILLIAM RESERVOIR



HU-0216 DEAN POND





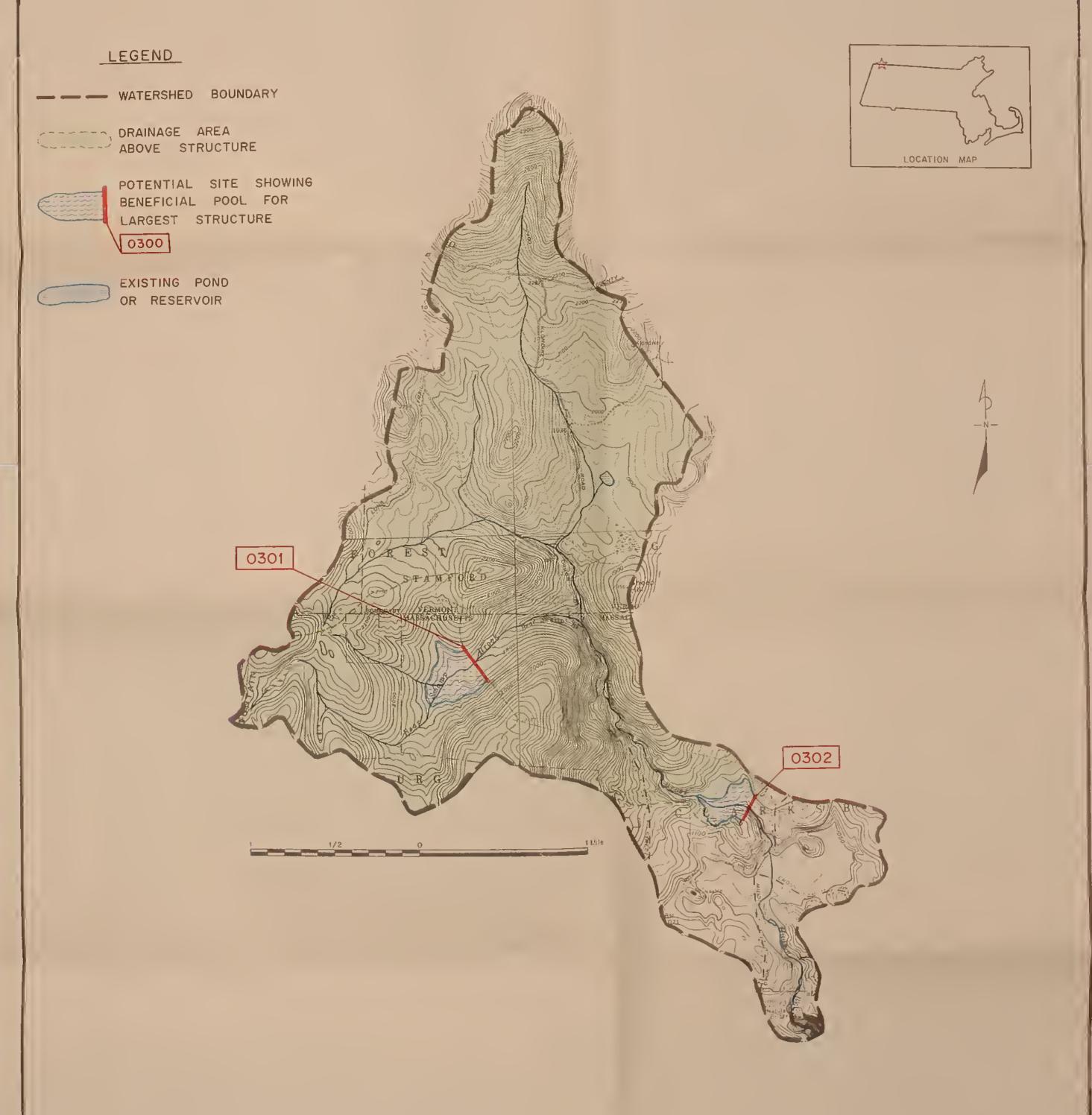
SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

1	* SAFE * YIELD	#PERCENT #CHANCE # (MGD)	LATITUDE 42-44-20 LONGITUDE 73-07-47 RUNOFF = 8.30 IN, PEAK FLOW = 436 CFS	* * * * * * * * * * * * * * * * * * *	LONGITUDE 73-05-52 FLOW = 2008 CFS	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *
1		FILL V3L (1000 CY)	DNGITUDE	114 59 118 329 474 535	ONGI TUDE	1052 1076 1069 1091	* * * * * * * * * * * * * * * * * * * *
	DAM	HGT FT	-20 LC PEAK F	42 42 42 42 42 42 42 43 43 44 45 45 45 45 45 45 45 45 45 45 45 45	₽ AK	1 49 9 50 6 50 1 50	******
		* TOP AREA * ELEV * (AC) * (MSL)	LATITUDE 42-44-20 LONGITU RUNOFF = 8.30 IN, PEAK FLOW =	1841.8 1832.1 1842.5 1864.6 1874.8	LATITUDE 42-43-32 LONGITU FF = 8.30 IN, PEAK FLOW =	1149.1 1149.9 1149.6	****** EFICIAL
RIVER	GN ATER	AREA (AC)	ATITUDE F = 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TIT	48 57 62 70	**************************************
-HUDSON	DESIGN HIGH WATER	ELEV (MSL)	RUNOF	1836-3 1826-1 1838-8 1860-0 1870-3	RUNOFF	1143.6 1145.1 1145.9 1147.1	**************************************
SUBWATERSHED-HUDSON RIVER	* * >	* * * * *	QUAD-WILLIAMSTOWN PRIN SPWY UESIGN STORM	940 * 4530 * 1870 * 770 * 740 * 730	MS GN STORM	21580 * 16290 * 13240 * 10220 *	#
SUBW	SPILLWAY	GE EST IN	LIAMST Y DESI	7.0 1.5 5.4 19.7 27.7 30.5	-NORTH ADAMS SPWY DESIGN	0.6	**************************************
•	EMERGENCY SPIL	STORAGE AT CREST AC FT I	QUAD-WILLIAMSTOWN PRIN SPWY DESIGN			152 208 264 371	***** A AND D ON T
SUBWATERSHED-HUDSON RIVER	EMERG	CREST ELEV TYPE (MSL)	USGS QUAD-WILLIAMSTOWN 100-YR PRIN SPWY DESIGN STO	1834.1 E 1815.3 T 1829.8 T 1857.8 E 1868.6 E 1872.0 E	USGS QUAD-NORTH ADAMS	1133.6 C 1136.8 C 1139.3 C 1142.5 C	**************************************
			*	4.6 * 15.3 * 29.9 * 47.4 * 60.0 *	6 1 6	33°.7 36°.8 * * 42°.5 45°.5	**************************************
STUDY AREA-HUDSON	BENEFICIAL POOL	COST/ SURF AC (\$)	SITE-HU-0301 DA= 1.41 SQ MI = 902 AC SITE RATING (1) STREAM WATER QUALITY (B)	1804.6 0 0.0 4 4.6 1815.3 100 1.2 5040 14 35660 15.3 1829.8 397 5.3 1920 27 28720 29.9 1847.3 990 13.2 1160 41 27700 47.4 1860.1 1583 21.1 970 52 29240 60.0 1865.5 1880 25.0 900 58 28960 65.5	DA= 6.49 SQ MI = 4154 AC STREAM WATER QUALITY (8)	16 204210 20 166660 24 146620 41 93380	**************************************
STUDY AREA-HUDSON	oor	AREA (AC)	41 SO AM WATE	14 27 27 41 52 58	49 SO AM WATE	16 20 24 24 41	****** D ON 19 LWAY ST
STUDY	BENEFICIAL POOL	COST PER AC FT (\$)	DA= 1 STRE	5040 1920 1160 970 900	DA= 6 STRE	32780 21710 16480 11880	***** E BASE
	BENEFI	STORAGE FT IN	33	13 2 2 2 1 1 2 2 2 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(3)	0000	***** DSTS AR
1		STO!	TE-HU-0301 SITE RATING (1)	100 397 990 1583 1880	TE-HU-0302	100 156 212 319	***** (1) C
1		ELEV (PSL)	SITE RATIN	1804.6 1815.3 1829.8 1847.3 1860.1	SITE-HU-0302 SITE RATIN	1133.6 1136.8 1139.3 1142.5	***** NOTES -

(2) EMERGENCY SPILLWAY SIURAGE AND CUSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. (3) EMERGENCY SPILLWAY TYPE CODE- C=CONCRETE CHUTE, D=CONCRETE DROP, E≖EXCAVATED, T= TWO SPILLWAYS, N= NONE (3)

TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES.
ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

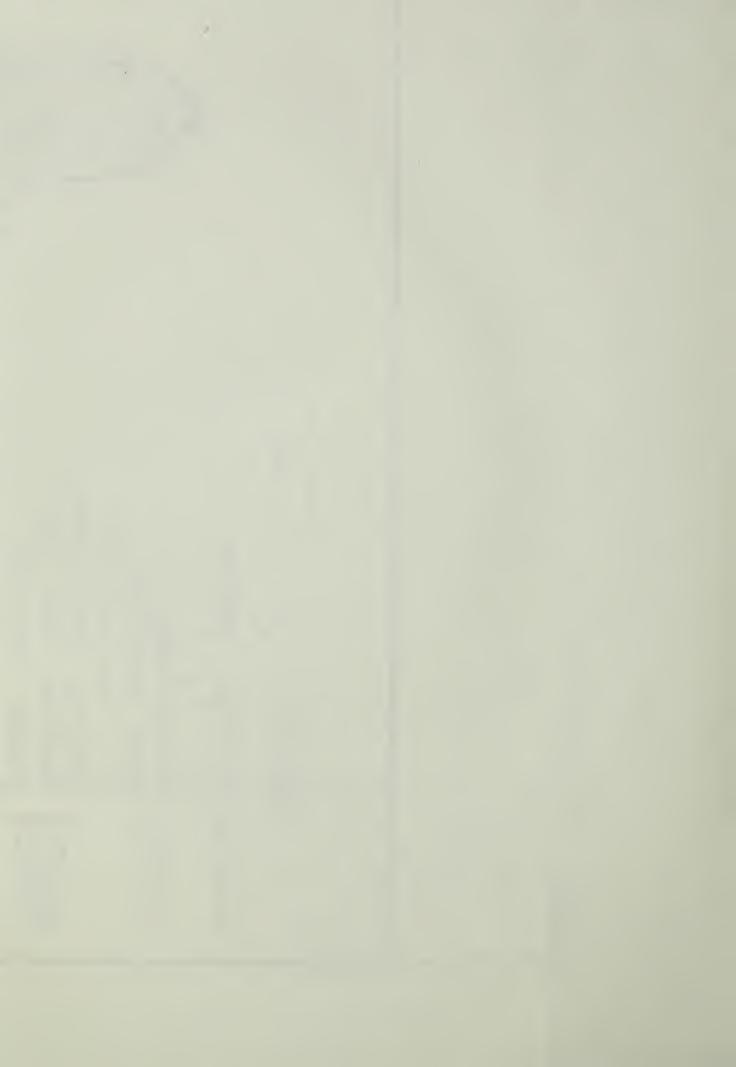


HUDSON BROOK (HU-03) HUDSON STUDY AREA

MASSACHUSETTS

EXISTING AND POTENTIAL RESERVOIR SITES
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Source-U.S.G.S. Quad Sheets
North Adams, Moss.-Vermont—1960
Pawnal, Vermont—1954
Stamford, Vermont—1954
Williamstawn, Moss.-Vermont—1960



HUDSON STUDY AREA SITE DATA FOR

Subwatershed HU-04, Green River

The Green River subwatershed covers about 27,100 acres in Adams, Cheshire, Hancock, Lanesborough, New Ashford, North Adams, and Williamstown; all in Berkshire County.

The main streams in the subwatershed are the Green River, East Branch of the Green River, and the West Branch of the Green River. The Green River and the East Branch of the Green River originate in New Ashford; join near the New Ashford - Williamstown line, and flow north to South Williamstown. The West Branch originates in Hancock and flows north to join the Green River at South Williamstown. From South Williamstown, the river flows north to its confluence with the Hoosic River in Williamstown.

Elevations in the subwatershed range from a high of 3490 feet at Mount Greylock in Adams to about 600 feet at the Hoosic River confluence.

In 1971, the Soil Conservation Service prepared a Preliminary Investigation Report under the Watershed Protection and Flood Prevention Act (Public Law 566) for this watershed.

The report concluded that a project was feasible for the Green River. Three potential reservoir sites were identified. Local interest in the watershed project has been slow to develop and planning efforts have been suspended until more local interest is apparent.

Six potential reservoir sites were studied in this inventory. There were no existing reservoirs which met study criteria.

POTENTIAL SITE HU-0401

Location:

On the West Branch of the Green River about 2 miles upstream from New Ashford Road in Williamstown, Massachusetts.

Berlin, N. Y.-Mass.-Vt. USGS quadrangle

Latitude: 42°38'33" Longitude: 73°16'06"

Facilities Affected:

Facility

Elevation

House, garage and barn

Geologic Both abutments are gravel. The right abutment may be shallow Conditions: to bedrock. Waterholding capabilities appear to be poor. Leakage is expected through both abutments and the foundation. Pervious borrow material for dam construction was located near the site; impervious material was not located.

Notes:

Engineering Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

Location:

On the West Branch of the Green River about 5300 feet down-stream from Main Road in Hancock, Mass.

Hancock, Mass.-N.Y. USGS quadrangle

Latitude: 42°36'21" Longitude: 73°17'12"

Facilities
Affected:

State Route 43 and utilities

Elevation 1217

Geologic
Conditions:

The left abutment is gravel. The right abutment is gravel, 5 to 10 feet thick, underlain by limestone bedrock. Depth to bedrock in the foundation is estimated to be about 10 feet. Waterholding capabilities appear to be poor. Leakage is expected through both abutments and the foundation. Borrow material for dam construction was located near the site.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

POTENTIAL SITE HU-0403

Location:

On Hopper Brook about 2500 feet upstream from Hopper Road in Williamstown, Massachusetts

Williamstown, Mass.-Vt. USGS quadrangle

Latitude: 42°39'42" Longitude: 73°12'45"

Facilities Affected:

Facility	Elevation
Bressett Road and utilities	925
House and barn	955
House	958
2 houses	960
House	970
House	975
House	980
House	1000
Barn	1 005
House	1015

Geologic Conditions:

The right abutment is a gravel terrace. The left abutment is gravel and may be shallow to bedrock at the higher elevations. Depth to bedrock in the foundation is estimated to be less than 15 feet. Waterholding capabilities appear to be poor. Leakage can be expected through both abutments and the foundation. Pervious borrow material for dam construction was located near the site; impervious material was not located.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

Location:

On the East Branch of the Green River about 1000 feet upstream from its confluence with the Green River in New Ashford, Massachusetts.

Williamstown, Mass.-Vt. USGS quadrangle

Latitude: 42°37'33" Longitude: 73°13'24"

Facilities Affected:

Facility Elevation House, barn and garage 1080 House, 2 barns and garage 1090 Royce Road 1114

Geologic

Both abutments are schistose bedrock except for a small gravel Conditions: terrace on the left abutment. Bedrock outcrops in the streambed. Waterholding capabilities appear to be good. Borrow material for dam construction may be scarce.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0405

Location:

On the Green River about 450 feet upstream from Ingraham Road in New Ashford, Massachusetts

Cheshire, Mass. USGS quadrangle

Latitude: 42°36'05" Longitude: 73°14'14"

Facilities Affected:

Facility Ingraham Road and Elevation 1270

utilities

House

1300

Geologic Conditions: Both abutments are thin glacial till underlain by limey schist and limestone bedrock. Depth to bedrock in the foundation is estimated to be less than 15 feet. Waterholding capabilities appear to be fair to good. There may be leakage through bedrock in the foundation. Borrow material for dam construction was not located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

Location: On the East Branch of the Green River about 100 feet upstream

from Greylock Road in New Ashford, Massachusetts.

Cheshire, Mass. USGS quadrangle

Latitude: 42°35'46" Longitude: 73°12'59"

Facilities Facility Elevation
Affected: Bowers Road 1548

Geologic Both abutments are thin glacial till underlain by schist Conditions: bedrock. Bedrock is exposed in the brook. Waterholding capabilities appear to be fair to good. There may be leakage through foundation bedrock. Borrow material for

dam construction was located near the site. Sufficient quantities may not be available on-site.

Engineering The right abutment is recommended for the excavated emer-Notes: gency spillway location.

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

****** * SAFE * YIELD	* AI 95 *PERCENT *CHANCE * (MGD)	73-16-06 2477 CFS	* * * * 0.49 1.21 2.08 * 2.42	******* 73-17-12 888 CFS	* * * * * * * * * * * * * * * * * * *	73-12-45 1466 CFS	* * * * * * * * * * * * * * * * * * *	**************************************
*	FILL HGT VOL (1000 FT CY)	LATITUDE 42-38-33 LONGITUDE 73-16-06 N STORM RUNDFF = 8.30 IN, PEAK FLOW = 2477 CFS	41 189 49 293 55 392 54 366	**************************************	57 258 37 80 57 261 65 361 65 366	42 LONGITUDE PEAK FLOW =	88 759 49 176 72 452 92 865 100 1087	************ POGL. PILLWAYS, N= NON PARISON PURPOSES LY, AND ARE NOT
**************************************	* TOP * ELEV * (MSL)	DE 42-38-33 L 8.30 IN, PEAK	** 991.0 ** 999.1 ** 1005.4 ** 1003.8	******* E 42-36-21 •30 IN, PE	* 1212.0 * 1192.0 * 1212.3 * 1219.6 * 1219.9	42-39-	* 1007.8 * 969.0 * 992.3 * 1012.0	**************************************
**************************************	######################################	LATITUD RUNOFF = 8	983.5 59 991.8 77 999.5 106 999.9 108	*********** LATITUDE RUNOFF = 8.3	9 10 0 0 11	LATITUDE RUNOFF = 8.3	997.0 49 961.9 20 984.8 37 1006.0 56 1017.1 66	**************************************
00000000000000000000000000000000000000	COST * EPER + EPER + COST * CO	N STORM R	10010 * 9 4160 * 9 1930 * 9 1570 * 9	**************************************	****	R.	3680 * 9 11610 * 9 6290 * 9 2460 * 10 1780 * 10	**************************************
**************************************	₩ 1	QUAD-BERLIN PRIN SPWY DESIGN	170 0.4 492 1.1 1137 2.4 1459 3.0	**************************************	1159 7.6 123 0.8 428 2.8 1039 6.8 1650 10.8 1771 11.6	USGS QUAD-WILLIAMSTOWN 00-YR PRIN SPWY DESIGN STO	1049 4.1 138 0.5 538 2.0 1337 5.3 2380 9.3	AND CO ON TOT D=CON ON FI
**************************************	**************************************	M.	** 968.9 T 977.8 T 988.9 T 993.0 T	********* USGS QU 100-YR PR		H ,	* 986.1 T * 948.0 T * 970.0 T * 993.0 T * 1012.5 T	**************************************
**	DEPTH AT DAM (FT)	5626 AC LITY (B)	0 18.9 27.7 3 38.9 0 43.0	******** = 1837 AC UALITY (B)	9.5 119.4 32.9 46.2 55.8	3034 AC LITY (B)	15.2 28.0 50.0 73.0 92.5	**************************************
**************************************	**************************************	**************************************	26 65830 47 43600 68 32290 81 28220	**************************************	6 14 60800 34 38550 58 30420 70 26420	= 4.74 SQ MI = 3034 AC STREAM WATER QUALITY (B)	5 11 14,1800 26 130970 45 73100 62 68580	**************************************
######################################	######################################	SITE-HU-0401] DA= 8.79 SQ MI = 5626 AC USGS SITE-RATING (3) STREAM WATER QUALITY (B) 100-YR	17050 4860 2050 1650	**************************************	8770 3220 1720 1130 1070	SITE-HU-0403 DA= 4.74 SQ MI = 3034 AC SITE RATING (3) STREAM WATER QUALITY (B)	16010 6760 2530 1810	**************************************
######################################	**************************************	[]	20 0.2 20 0.8 3.0	******** [6 (3)	0 0.0 10 0.7 15 2.5 6 6.6 7 10.6	10 (3)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	**************************************
* * *	#******** ELEV STO (MSL) AC FT	SITE RATING	968.9 100 977.8 422 988.9 1066 993.0 1388	********** SITE-HU-0402 SITE RATING	1154.5 0 11174.4 100 11187.9 405 1201.1 1016 1210.8 1627	SITE-HU-0403	935.1 0 948.0 100 970.0 500 993.0 1299 1012.5 2343	**************************************

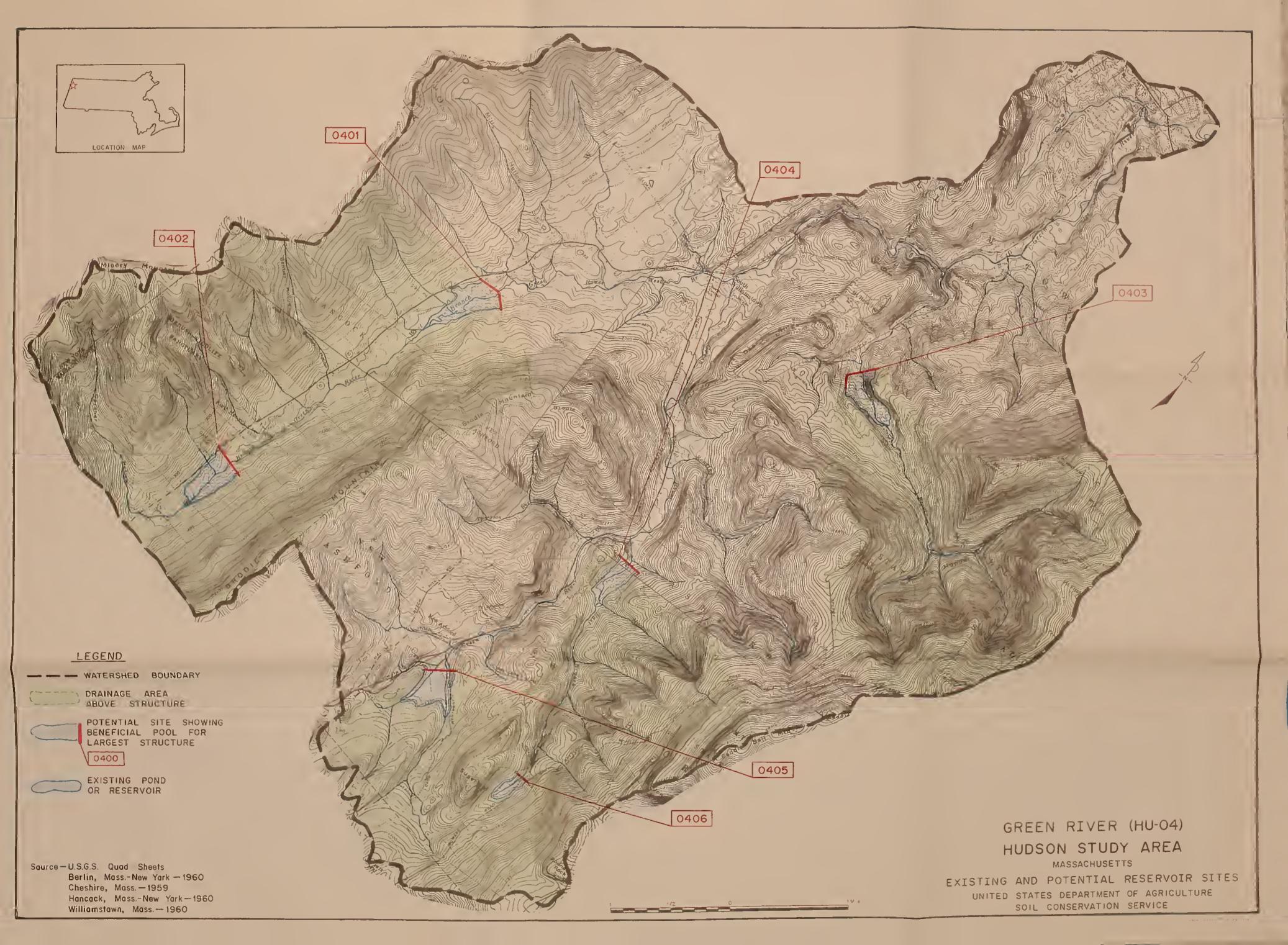
** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

1	SAFE	AT Q5	SCENT ANCE	(MGD)	73-13-24 1095 CFS		0.35	0.74	62.1	1.70	本本本本本本	612 CFS		*	0.28	1.18	1.48	1.54	73-12-59	CFS	* * *	0.18	07.0	0.23).26	0.27		. L	_
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	DAM	***	HGT	FT	33 L PEAK	Č	48	64	9 C		* * u			46	40	99	70	02	ŧ ŧ	EAK	77	44	47	20	49	20	POOL	ARIS	•
	Q	*****		(MSL)	LATITUDE 42-37-33 LONGITUD FF = 8.30 IN, PEAK FLOW =		1097.6	11113.9	1130.9	1140.1	*****	42-30-03 0 IN, PE		1296.0	1289.6	1316.1	1319.8	1320.1	42-35-46	O IN, P	1 506 1	6	1597.1	1599.6	1599.5	1600.1	BENEFICIAL P	OR COMP	ALS UNE
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SUBWATERSHED-GREEN RIVER	DESIGN HIGH WATER	******	ELEV	(MSL)		ć	1090.6	1107.6	1136.0	1137.1	**	RUNDFF = 8.		1290.0	1281.8	1311.3	1316.3	1317.1	L.A	RUNDFF	1502 4	1589.9	1592.5	1595.0	1596.5	1597.1	INCLUDING BENEFICIAL POOL.	• E-EACAVAIED• 13 INU SPILLMAT. N ARE PRIMARILY FOR COMPARISON RETWEEN DEVELODMENTS ONLY. AND	WEEN OF
HED	* *	***	* * *	*	STORM	* 1	* *	* 0	* *	*	*	STORM	*	* •	* *	*	*	*		STORM	* *	*	* 0	* 01	*	*	t •	- Z d	00
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SUBWA	SPILLWAY	******		AC FT IN (\$)	QUAD-WILLIAMSTOWN PRIN SPWY DESIGN		7.0	2.0	4.5		*****	DESIG		7.5	1.1	18.2	18.6	2164 20.5	QUAD-CHESHIRE	DESIGN	1 7	2.9	3.5	4.1	5.5	5.8		- FIGURES SHOW	
	F	***	STORAGE AT CREST	FT	WILL	0	128	370	428	414	**************************************	SPWY		794	116	934	696	2164	CHES	SPMY	15.1	105	129	153	201	210	AND COST ON TOTAL	ON. F	בטבע
	GENC	***	STAT	AC	UAD- RIN			⊢ +		- L	* C * C * C	PRIN		ш ,		E -	T 1	T 2	UAD-	PRIN	-		_	—	-	* * * ·	•	ATIO TO	_
*	EMERGENCY	***	ST	1	+ O/ O.		7.1	1095.0	11159.1	1132.5	* C			87.6	280 8	1308.9	309.4	312.5		-YR P	a	o m	585.6	588.3	591.8	1592.5 T	GN CRITERIA S ARE BASED		_
		****	CREST	(MSL)	USG:		1077.1	109	1129.1	113	****	100-Y		128	128	130	130	131	US	100-	158	158	158	158	159	159	GN CR S ARE		7.
4	* *	* * *	*** E ,	*	AC 3)	* 4	* * 0	* 0	* *	* 5	* * C	3 (#	# ·	* * ~	* 5	* 4.	* 5 *	AC.	3)	* *	*	* 5 *	* 3	* 8	* 5		INARY	
		***	DEPTH	(FT)	266 [Y (,	27.0	45.0	79.1	82.5	****	Y (8)		01	2.05	46.4	59.4	62.5	435 AC	□	-	333	35.5	38	41.8	42.		FILL IN	NE ARE
N H		***	TZ RF		= 2266 AC		010	041	62500	63430	* - *	JALIT			097	31280	32420	33220		JAL I		40	46190	09	040	80	1974 S.C.S. STORAGE AND	P R	
IUDSC.		****	COST/ SURF	(8)	MI		139010	85140	62500	634	* * *			,	28960	315	324	335	Ψ	R O		51440	461	42160	38940	38580	74 S	101	
EA-F		***	AREA	(AC)	3.54 SQ MI EAM WATER (`	0	18	3 0	41	* 0	WATE		4 .	77	52	63	99	SO	WATE	-	→ ∞	10	12	14	14	N 19	BASE	, K
STUDY AREA—HUDSON	BENEFICIAL POOL	经验证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证证	COST A		DA= 3.54 SQ MI = 2266 AC STREAM WATER QUALITY (B)		12740	4570	1860	1800	公安水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水水	STREAM WATER QUALITY		0110	2640	1350	1050	1312.5 2148 20.2 1020 66 33220 62.5	DA= 0.68 SQ MI =	STREAM WATER QUALITY (B)		4300	3750	3350	2800	1592.5 204 5.6 2730 14 38580 42.5	COSTS ARE BASED ON 1974 S.C.S. DESIGNERACE OF STREET OF	TABULAR DATA ARE BASED ON PRELIMINA	MULIC DAR C
***************************************	ENEFIC	***	GE	N.	D (1)	c	0.0	1.7	* 6	7.6	* * * * * * * * * * * * * * * * * * * *	(1)		0 0	2 4	11.3	18.4	20.2	Q	(1)	0	2.8	3.4	4.1	2.4	5.6	COSTS ARE	TABULAR D	C V A I I C IV S
	a.	***	STORAGE	FT	A S	C	100	342	1309	1446	***	7()		0 8	001			2148	9		c	100	124	148	196	204	COS		
		***	S	AC FT	1-04C		_	rm 6		14	***	RATI			1 7	12	19	21	-040	RATI		-	_	_	1	2 * * *	325	(4)	
***************************************		***	ELEV	(MSF)	SITE RATING	10201	1077.1	1095.0	1129.1	1132.5	3070-11H-313	SITE RATING		1260.9	1280.8	1296.4	1309.4	1312.5	SITE-HU-0406	SITE RATING	1560.4	1583.0	1585.6	1588.3	1591.8	1592.5	NOTES -		

ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **





HUDSON STUDY AREA SITE DATA FOR

Subwatershed HU-05, Kinderhook Creek

The Kinderhook Creek subwatershed covers about 13,800 acres in Hancock and Lanesborough in Berkshire County.

The main stream in the subwatershed is Kinderhook Creek which originates in Hancock and flows southwesterly to the New York state line. There are also a number of small streams which form in the mountains of the subwatershed and flow west to New York State.

Elevations in the subwatershed range from a high of 2400 feet in the mountains to a low of about 950 feet on Kinderhook Creek at the New York line.

Four potential reservoir sites and two existing reservoirs were studied.

POTENTIAL SITE HU-0501

Location:

On Kinderhook Creek about 700 feet upstream from Whitman Road in Hancock, Mass.

Hancock, Mass.-N. Y. USGS quadrangle

Latitude: 42°34'42" Longitude: 73°17'45"

Facilities Affected:

Facility
State Route 43 and
utilities

Elevation 1245

Geologic Conditions:

Both abutments are well graded gravels or silty gravels. Depth to bedrock in the foundation is estimated to be about 30 feet. Bedrock is probably limestone or limey schist. Waterholding capabilities appear to be poor. Leakage is expected through both abutments and the foundation. Pervious borrow material for dam construction was located near the site; impervious material was not located.

Engineering Notes:

Preliminary designs indicate that a concrete drop structure emergency spillway may be required at this site.

Location:

On Kinderhook Creek about 2400 feet upstream from Brodie Mountain Road in Hancock, Massachusetts.

Hancock, Mass.-N. Y. USGS quadrangle

Latitude: 42°33'48" Longitude: 73°18'04"

Facilities
Affected:

Facility

Elevation 1225

Geologic Conditions:

The right abutment is terrace gravel. The left abutment is thin terrace gravel underlain by limestone bedrock. Depth to limestone bedrock in the foundation is estimated to be about 10 feet. Waterholding capabilities appear to be poor. Leakage is expected through the foundation and both abutments. Pervious borrow material for dam construction was located near the site; impervious material was not located.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

POTENTIAL SITE HU-0503

Location:

On Kinderhook Creek about 1800 feet upstream from Potter Mountain Road in Hancock, Massachusetts

Hancock, Mass.-N. Y. USGS quadrangle

Latitude: 42°32'43" Longitude: 73°18'44"

Facilities
Affected:

Facility
House and garage

Elevation 1080

Geologic Conditions:

Both abutments and the foundation are terrace gravels. Depth to limestone bedrock in the foundation is unknown. The bedrock is probably limestone which is locally cavernous. Waterholding capabilities appear to be poor. Leakage is expected through both of the abutments and the foundation. Pervious borrow material for dam construction was located near the site; impervious material was not located.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

Location:

On an unnamed tributary to Wyomanock Creek, about 3300 feet upstream from State Route 22 in New Lebanon, New York. About

80 percent of the pond area is in Massachusetts.

Pittsfield West, Mass.-N. Y. USGS quadrangle

Latitude: 42°29'51" Longitude: 73°21'35"

Facilities Affected:

Facility

None below elevation 1167

Geologic Conditions:

Both abutments are glacial till and are shallow to bedrock. Depth to bedrock in the foundation is estimated to be about 15 feet. Waterholding capabilities appear to be good. Borrow

material for dam construction was located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

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****** SAFE YIELD	* AT 95 *PERCENT *CHANCE * (MGD)	******* 73-17-45 402 CFS	**** 0.24 0.31 0.37 0.43	73-18-04 1423 CFS	**** 0.39 1.16 2.05 2.70 2.84	73-18-44 2984 CFS	1.05	* * * * * * * * * * * * * * * * * * * *
* * *	#	MOI TUDE		TUDE = 1	577 * 148 * 470 * 1021 * 1235 *	. ш	364 * * * * * * * * * * * * * * * * * * *	**
*****	***** HGT FT	.42 LONGI PEAK FLOW		• <	55 74 80 80		58 46 51 49	******
EEK ***** D	TOP ELEV (MSL)	**************************************	1249.5 1249.8 1250.0 1248.9 1250.0	42-33- 30 IN,	1209.6 1186.1 1205.3 1224.1 1229.8	LATITUDE 42-32-43 L FF = 8.30 IN, PEAK	1092.9 1100.6 1106.1 1103.8	*
OK CREEK *******	AREA ***	ITUDE = 8.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	LATITUDE FF = 8.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ITUDE = 8.	0.000	****
SUBWATERSHED-KINDERHOOK ***********************************	**************************************	r*************************************	1246.1 1245.3 1246.6 1245.9 1247.0	LAT	1201.1 1179.6 1197.8 1217.0 1226.0	LAT RUNDFF	1085.5 1092.8 1098.4 1099.6	**************************************
ATERSHED- ************************************	COST ** PER ** AC FT * (\$) **	SN STORM	890 * 4680 * 2940 * 2130 * 1780 * 1670 *	SN STORM	2160 * 8010 * 3400 * 1980 * 1350 *	GN STORM	8710 * * 7260 * * 7460 * * 7460 * * 7460 * * 7460 * * 7460	*
SUBWA ******* SPILLWAY	** + S			OCK DESIGN	4.1 0.6 2.7 6.8 11.2	OCK DESIGN	1.0	*
*****	********* STORAGE AT CREST AC FT IN	**************************************	409 1110 172 234 296 323	QUAD-HANCOCK PRIN SPWY DE	1018 4.1 137 0.6 659 2.7 1702 6.8 2746 11.2 3043 12.3	QUAD-HANCOCK PRIN SPWY DE	385 583 979	*
****** EMERGENCY	*	**************************************	1243.9 E 1238.3 T 1239.6 T 1240.9 T 1242.0 T	USGS QUAD- 00-YR PRIN	1191.4 T 1166.8 T 1183.1 T 1204.1 T 1219.1 T	PRI +	1078.0 T 1083.8 T 1092.8 T	**************************************
* * *	* * * * *	* "	****	-		- *•	* * * * *	M
* * * *	****** DEPTH AT DAM (FT)	832 1TY (10000	2944 I TY (10 0 16 7 33 2 54 0 69 1	= 6912 AC	23.0 28.7 37.8	**** •S• DI
*****	COST/ SURF AC (\$)	SQ MI = VATER QUAL	13190 10210 9190 9100 9090	SO MI = 2944 AC	51710 56050 56090 45760 44730	AI = QUAL	66010 48220	**************************************
REA-HL *****	* * * * * * * * * * * * * * * * * * *	WATER	39 50 58 58 59	O SO P	21 40 60 81 88	O SO MI WATER C	31 38 50	***** 0N 197 AY ST
STUDY AREA-HUDSON ************************************	**************************************	SITE-HU-0501 DA= 1.30 SQ MI = 832 AC SITE RATING (3) STREAM WATER QUALITY (B)	8 1.1 5170 39 13190 5.3 3120 50 10210 6.6 2230 54 9190 7.8 1840 58 9100 9.0 1720 59 9090 9.5	DA= 4.60 SQ MI = 2944 AC STREAM WATER QUALITY (8)	7 10.00 10960 21 51710 16.7 3600 40 56050 33.2 2020 60 56090 54.0 1370 81 45760 69.1 1310 88 44730 72.5	DA= 10.80 SQ MI = 6912 AC STREAM WATER QUALITY (B)	7360 5040 2700	**************************************
*****	* * * * * * * * * * * * * * * * * * *	(3)	0.0 1.4 2.3 4.1 4.1	(3)	0.0 0.4 2.5 6.8 111.0	(1)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	:*************************************
* * * * * * * * * * * * * * * * * * * *	**************************************	TE-HU-0501	162 162 224 285 313	TE-HU-0502	100 622 1665 2709 3006	SITE RATING	298 497 893	(1) COS
**	####### ELEV (MSL)	SITE RATIN	1234.1 0 0.0 1238.3 100 1.4 1239.6 162 2.3 1240.9 224 3.2 1242.0 285 4.1 1242.5 313 4.5	SITE HATIN	1166.0 0 0.0 1166.8 1C0 0.4 1183.1 622 2.5 1204.1 1665 6.8 1219.1 2709 11.0	SITE RATIN	1078.0 1083.8 1092.8	******* NOTES -

EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONE TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE (2) EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. (4)

CONSIDERED ACCURATE TO THAT DEGREE.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

****	* SAFE * YIELD	LL *PERCENT L *CHANCE 000 * CY) * (MGD)	**************************************	* * * * * * * * * * * * * * * * * * *	NONE 35ES.
***		FILL V3L (1000 CY)	101 TUBE	64 107 107 165 194	S. N=
**	DAM	HGT FT	******* 51 LON 5EAK FL	26 28 31 39 47 50	OGOL. TLLWAY
EX **		* TOP * ELEV * (MSL)	**************************************	* 1145.8 * 1148.3 * 1151.3 * 1157.0 * 1167.0	ICIAL F TWO SF OR COMF VTS ONL
CRE	**	* * * *	#### JDE . 8•30	* * * * * * * * * * * * * * * * * * *	NEF T T
100K	N TER	AR E	# T ! .	*	IG BE TED, IARII
SUBMATERSHED-KINDERHOOK CREEK	DESIGN HIGH WATER	* CREST STORAGE COST *	******* L/ R UNOFF	* 1141.6 * 1144.1 * 1147.6 * 1155.8 * 1163.6 * 1163.6	SIGN CRITERIA AND COST DATA. STS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. SNCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T * TWO SPILLWAYS, N= NONE NARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. ST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT T
HED-	* *	* * * *			E I P E WN A
ATERS	>	COST PER AC FT (\$)	**************************************	*	SIGN CRITERIA AND COST DATA. STS ARE BASED ON TOTAL STORAGE, DNCRETE CHUTE, D=CONCRETE DROP, VARY INFORMATION. FIGURES SHOWN ST 0.1 FOOT TO SHOW VARIATION BE
SUBI	PILLWA	GE EST IN	***** TSF IEL Y DESI	303 6.5 385 8.2 508 10.8 836 17.7 1229 26.2 1426 30.4	COST COST COTAL SONCRET
***	EMERGENCY SPILLWAY	STORAGE AT CREST AC FT I	***** D-01 N S P W	303 385 508 836 1229 1426	A AND ON T D CC TION.
*	ERGE	,	*** 000 PR 1	4888888 	ERIA ASE HUTE RMAI
***	Σ U	* CREST * ELEV *+ TYPE * (MSL)	***** USGS 100-YR	1139.4 1141.8 1145.3 1153.3 1161.3	ARE BRETE CRITICAL INFO
**			* *	*******	STS ONCE NAR
***		DEPTH AT DAM (FT)	***** 563 A ITY (B	2.0 11.3 118.7 28.7 36.8 40.4	S. DE AND CO EL CEC RELIMI
NDSQL		COST/ SURF AC (\$)	*****	17800 13020 12960 13770 14410	RAGE / SEC ON PI
REA-HU	_	AREA (AC)	***** 8 SQ P	3 18 30 41 48 52	ON 197
STUDY AREA-HUDSON	BENEFICIAL POOL	COST PER AC FT (\$)	##************ DA= 0.88 SQ MI = 563 AC STREAM WATER QUALITY (B)	3230 1410 830 670 640	(1) COSTS ARE BASED ON 1974 S.C.S. DESIGN CRITERIA AND COST DATA. (2) EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. (3) EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T* TWO SPILLWAYS, N= NONE (4) TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. (5) ELEVATIONS ARE SHOWN TO THE NEAREST O.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO
*	BENEFI	AGE IN	*** (1)	0.0 2.0 5.9 13.6 21.2 25.0	STS AR ERGENC ERGENC 3ULAR EVATIO
4		STGRAGE AC FT II	**************************************	0 0 0 0 0 2 0 2 0 2 0 2 0 2 0 0 2 0 0 2 0	25835
STUDY AREA-HUDSON		COST COST COST DEPTHELEV STGRAGE PER AREA SURF AT AC FT AC DAM (MSL) AC FT IN (\$) (AC) (\$) (FT)	**************************************	1122.0 0 0.0 3230 18 17800 11.3 1131.8 279 5.9 1410 30 13020 18.3 1148.8 637 13.6 830 41 12960 28.3 1156.8 994 21.2 670 48 13770 36.8 1160.4 1173 25.0 640 52 14410 40.4 ***********************************	NOTES -

ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO BE CONSIDERED ACCURATE TO THAT DEGREE.

** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

EXISTING SITE HU-0510 (Starobin Pond)

Location:

On Kinderhook Creek at Whitman Road in Hancock, Massachusetts.

Hancock, Mass.-N. Y. USGS quadrangle

Surface Elevation 1244 Surface Area
(Acres)

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq. Mi.)
1028 1.61

Potential for Expansion:

Please refer to Site Data and Design Summary Table for Potential Site HU-0501 which is located about 500 feet upstream.

Remarks:

The dam is the Whitman Road embankment. The principal spill-way is a 42-inch corrugated metal culvert with rock riprap around the inlet.

Ownership and Use:

The pond is owned by Dr. Joseph R. Starobin and is used for fish and wildlife habitat.

EXISTING SITE HU-0511 (Berry Pond)

Location:

On Berry Pond Creek at Berrypond Circuit Road in Hancock, Massachusetts.

Hancock, Mass.-N. Y. USGS quadrangle

Surface Elevation 2070

Surface Area (Acres)

Height of Dam (Ft.)

Drainage Area
(Acres) (Sq. Mi.)
64

Potential for Expansion:

The small drainage area limits expansion potential. The pool area is already large in relation to the size of the drainage area.

Remarks:

The dam is formed by the embankment of Berrypond Circuit Road. The principal spillway is a 6-foot wide concrete and stone arch culvert.

Ownership and Use:

The pond is owned by the Commonwealth of Massachusetts, Department of Environmental Management and is used for recreation.



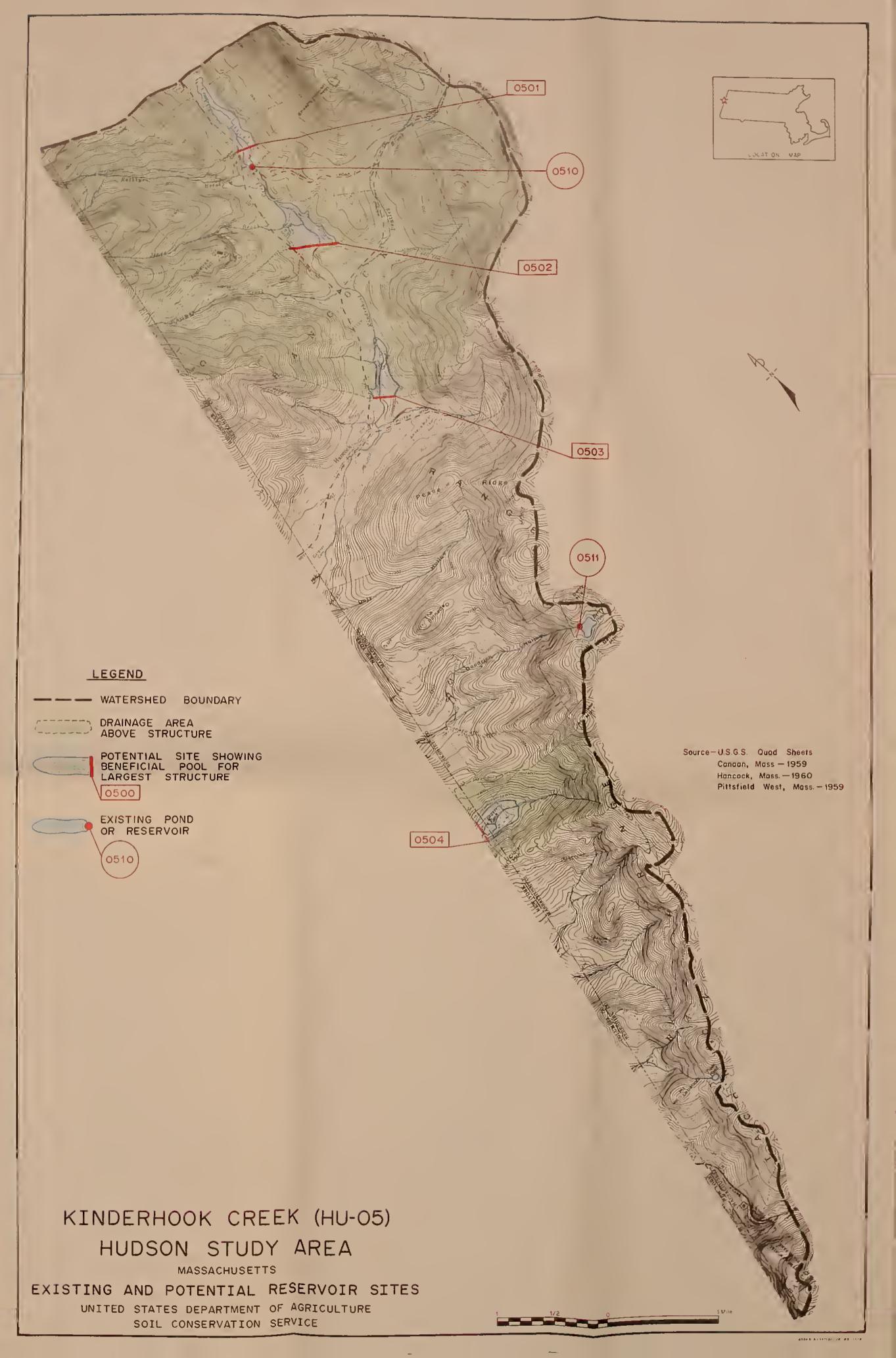
HU-0510 STAROBIN POND



HU-0511 BERRY POND









HUDSON STUDY AREA SITE DATA FOR

The Bashbish Falls subwatershed covers about 9,500 acres in the town of Mount Washington, Berkshire County.

Subwatershed HU-06, Bashbish Falls

Ashley Hill Brook, City Brook, Guilder Brook, and Wright Brook combine to form Bashbish Brook which flows westerly to New York State.

Elevations in the subwatershed range from a high of about 2600 feet on Mount Everett to about 850 feet on Bashbish Brook at the New York state line.

Six potential reservoir sites and two existing reservoirs were studied.

POTENTIAL SITE HU-0601

Location: On Guilder Brook about 150 feet upstream from Cross Road

in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°05'57" Longitude: 73°27'37"

Facilities Facility Elevation
Affected: 2 houses and garage 1607
Greenhouse and swimming pool 1607

Geologic Both abutments are shallow ground moraine underlain by Conditions: pre-Cambrian gneiss. Depth to gneiss bedrock in the foundation is estimated to be about 5 to 10 feet. Waterholding capabilities appear to be good. Borrow material for dam con-

struction was not located near the site.

Engineering The right abutment is recommended for the excavated emerNotes: gency spillway location.

Location: On City Brook about 1600 feet upstream from West Street in

Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°05'35" Longitude: 73°27'40"

Facilities	Facility	Elevation
Affected:	East Street and utilities	1540
	House	1550
	House	1560
	House and garage	1 565
	2 houses	1570
	House	1580

Geologic Conditions: Both the abutments are shallow ground moraine underlain by pre-Cambrian gneiss. Depth to gneiss bedrock in the foundation is estimated to be less than 15 feet. Waterholding capabilities appear to be good. Borrow material for dam con-

struction was not located near the site.

Engineering Notes:

Preliminary structure designs indicate that a concrete chute emergency spillway may be required at this site.

POTENTIAL SITE HU-0603

Location:

On City Brook about 1400 feet upstream from East Street in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°05'19" Longitude: 73°27'05"

Facilities	Facility	Elevation
Affected:	East Street and utilities	1595
	House and garage	1603

Geologic Conditions: Both abutments are shallow ground moraine underlain by gneiss bedrock. Depth to bedrock in the foundation is estimated to be about 5 to 10 feet. Waterholding capabilities appear to be good. Borrow material for dam construction was not located

near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0604

On City Brook about 2700 feet upstream from East Street Location:

in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°05'14" Longitude: 73°26'53"

Facilities Facility

None below elevation 1660 Affected:

Geologic Conditions:

Both abutments are shallow ground moraine underlain by pre-Cambrian gneiss. Depth to gneiss bedrock in the foundation is estimated to be about 10 to 20 feet. Waterholding capabilities appear to be good. There may be leakage through the foundation. Borrow material for dam construction was not located near the site.

Engineering

Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0605

Location:

On Lee Pond Brook about 1500 feet upstream from East Street in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°04;39" Longitude: 73°28:00"

Facilities

Facility

Elevation

Affected:

Geologic

East Street and utilities

Both abutments are moraine or glacial till and are shallow to bedrock. Depth to gneiss bedrock in the foundation is Conditions: estimated to be less than 15 feet. Waterholding capabilities appear to be good. Borrow material for dam construction

was not located near the site.

Engineering Notes:

The right abutment is recommended for the excavated emergency spillway location.

POTENTIAL SITE HU-0606

Location: On Ashley Hill Brook about 7400 feet upstream from its con-

fluence with Lee Pond Brook in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Latitude: 42°04°35" Longitude: 73°29°14"

Facilities Facility

None below elevation 1847 Affected:

Geologic Both abutments are shallow ground moraine underlain by gneiss Conditions: bedrock. Depth to pre-Cambrian gneiss bedrock in the foundation is estimated to be about 10 feet. Waterholding capabili-

ties appear to be good. Borrow material for dam construction

was not located near the site.

The emergency spillway should be located on the abutment that Engineering Notes:

would require the least rock excavation.

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

**	* * * * *	******	STUDY AREA-HUDSON ************************************	3EA-H	*****	* * *	* * *	**************************************	****	SUBMAT	ERSHED-	SUBMATERSHED-BASHBISH FALLS ***********************************	+ FALLS	*	****	#	****	* * *
		BENEFIL	CIAL PUUL	1	4	1		2 + 2 +	4	₹ 1		HIGH WATER	TER *		UAM		* YIEL	LO
ELEV	STORAGE	AGE	COST COST/ DEPTH ELEV STORAGE PER AREA SURF AT AC FT AC	AREA	COST/ SURF	DEPTH	* CREST * ELEV *+ TYPF	f f	STORAGE AT CREST	t t	OST ER ER	* ELEV AREA * ELEV *	AREA *		HGT	FILL HGT VOL	* A + 95 *PERCENT *CHANCE	ent Ce
(MSL)	AC FT	N I		(AC)	(\$)	(FT)	* (MSL)	AC F	FT	Z	* (\$)	(MSL)	(AC) *	(MSL)	FT	CYJ	* (MGD)	0)
SITE RATIN	J-0601 RATING	(1)	DA= 1.19 SQ MI = STREAM WATER QU	WATE	= 1.19 SQ MI = 762 AC STREAM WATER QUALITY (8)	762 AC ALITY (B)	USGS 100-YR		BASHB	QUAD-BASHBISH FALLS PRIN SPWY DESIGN ST	ISH FALLS DESIGN STORM	QUAD-BASHBISH FALLS LATITUDE 42-05-57 LONGITUDE 73-27-37 PRIN SPWY DESIGN STORM RUNDFF = 8.10 IN, PEAK FLOW = 359 CFS	LATITUDE FF = 8.	JDE 42-05- 8.10 IN:	57 LO PEAK F	42-05-57 LONGITUDE 0 IN, PEAK FLOW =	73-27-37 359 CFS	7-37 CFS
1586.1 1595.3 1600.9 1607.9	100 244 533 795	10.0	5750 2790 1490 1230	40808	28770 21050 15900 15210	13.2 18.9 25.9	* 1607.1 * 1607.8 * 1611.4 * 1614.4	ш ш ш ш —	507 8 541 8 732 11 930 14	8.0 8.5 11.5 14.7	1030 * 1060 * 930 * 850 *	1609.0 1610.1 1613.1 1616.6	53 56 79 81	1613.5 1613.6 1617.3 1619.8 1620.1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	70 71 97 118 126	* * * * * * * * * * * * * * * * * * *	.23 .39 .60
**************************************	*****	** **	**************************************	****	* * * * * * * * * * * * * * * * * * *	****** 958 AC	w 34.	**************************************	***** BASHB	***** ISH FA	*******	* * **********************************	*****	* ************************************	******	****** NGI TUDE	***************************************	****
SITE	RATING	(1)	STREAM	WATE	STREAM WATER QUALITY (B)	TY (B)	100-YR	PRIN	SPWY	DES I GN	DESIGN STORM	RUNDFF	80 **	10 IN.	PEAK F	= MOJ	924	CFS
1516.1 1534.3 1554.6 1573.6 1585.6	100 489 1266 2043	0.0 0.6 3.0 7.8 12.5	13030 3170 1800 1090	10 10 13 13 13 13	130520 52470 42520 27330	16.2 34.3 73.6 85.6	* 1559.8 * 1534.3 * 1554.6 * 1573.6 * 1585.6	1111	677 1124 513 2290 1068	4.1 0.8 1.8 7.8 2.7	2640 * 3020 * 1760 * 1080 *	1571.4 1548.5 1567.0 1587.1 1590.0	50 222 444 87 87	1579.4 1554.4 1572.8 1594.1 1593.0	79 73 94 93	230 90 185 359 347	# # # # # # # # # # # # # # # # # # #	833 449 91
SITE-HU-0603 SITE RATIN	****** 1-0603 RATING	*****	**************************************	1.15 SQ MI REAM WATER	**************************************	736 AC	* -	**************************************	**** BASHB SPWY	****** ISH FA DESIGN	******* FALLS GN STORM	**************************************	ITUDE = 8.	******** DE 42-05-19 8.10 IN, PEA	****** 19 LD	******* LONGI TUDE K FLOW =	******* 73-27-05 347 CFS	**** 7-05 CFS
1574.9	100	0.0	6120	12	.51450	9.8	* 1609.1 * 1592.5	ш⊢ц		7.5	980 *	1611.6	33 # 25	1616.4	10 4 1	84	* ****	21
1619.1	817 1533	13.2	1030 820	68	19540	54.1	* 1617.6 * 1627.6 * 1632.1 *	u — —	261 26	20.6 25.2	670 * 670 * 810 *	1629.8 1637.0	4 4 9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1633.8	469	199 257	** 0°.7¢ ** 0°.9¢	440
******	(1) CO (2) EM	**************************************	•	**** 3N 19 NY ST	****** 74 S.C. DRAGE AL	******* S. DESI ND COST	**************************************	RIA AP	**************************************	#******** D COST DATA. TOTAL STORAG	******** DATA. STORAGE, I	**************************************	*****	**************************************	*****	* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* * *

EMERGENCY SPILLWAY TYPE CODE— C=CONCRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWAYS, N= NONE TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISON PURPOSES. ELEVATIONS ARE SHOWN TO THE NEAREST 0.1 FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AND ARE NOT TO CONSIDERED ACCURATE TO THAT DEGREE. ** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQUISITION. **

(3)

BE

SUMMARY DATA FOR POTENTIAL UPSTREAM RESERVOIR SITES

	* SAFE * YIELD	## AT 95 #PERCENT #CHANCE # (MGD)	LATITUDE 42-05-14 LONGITUDE 73-26-53 RM RUNDFF = 8.10 IN, PEAK FLOM = 169 CFS	* * * * * *	E 73-28-00 184 CFS	* * * * * *	**************************************	0.25 0.25 0.95 1.23	N= NONE PURPOSES. ARE NOT TO BE
		FILL VOL (1000 CY)	ONGI TUD	91 113 1143 212 267 267 283	LONGITUDE IK FLOW =	21	LONGITUDE (FLOW =	167 110 205 205 406 427	* × Z Q
	DAM	HGT FT	14 L		0 111	15	**** 35 L PEAK	62 98 90	POOL. PILLM PARIS
S		TOP ELEV (MSL)	LATITUDE 42-05-14 LONGITUDE FF = 8.10 IN, PEAK FLOW =	# 1638.4 18 # 1642.3 23 # 1647.0 32 # 1655.8 40 # 1661.8	42-04- 10 IN	1660.1	**************************************	1822.3 1813.0 1827.6 1848.3 1850.0	INCLUDING BENEFICIAL POOL. E=EXCAVATED, T= TWO SPILLWAYS, N= NONE ARE PRIMARILY FOR COMPARISON PURPOSES. TWEEN DEVELOPMENTS ONLY, AND ARE NOT T
FALL	* *	AREA *	ITUDE	115 # 23 # 40 #	LATITUDE FF = 8.	27 ** WATER.*:	**** ITUDE = 8.	28 * * * * * * * * * * * * * * * * * * *	BENE ED, T RILY ELOPM
HBISH	DESIGN HIGH WATER	EV A	LAT	1			LAT RUNDFF	7.0 7.0	CAVATE PRIMA N DEVE
SUSMATERSHED-BASHBISH FALLS	D H G	ELEV (MSL)	, R	1634.1 1638.6 1643.5 1652.6 1658.8		F 1657.1 EFICIAL	# W	1815.0 1804.6 1821.6 1842.8 1847.0	411
				1990 1810 1570 1280 1160	FALLS GN STORM	2310 * 1657.1 FOR BENEFICIAL *	**************************************	3080 7250 2960 790 1010	SARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. SARE BASED ON TOTAL STORAGE, INCLUDING BENEFICIAL POOL. SRETE CHUTE, D=CONCRETE DROP, E=EXCAVATED, T= TWO SPILLWA RY INFORMATION. FIGURES SHOWN ARE PRIMARILY FOR COMPARISO O.I FOOT TO SHOW VARIATION BETWEEN DEVELOPMENTS ONLY, AN NL SITE SELECTION OR LAND ACQUISITION. **
Mens	LLWA	ST	BISH P	6.6 9.0 12.1 19.7 26.5		STORAGE	**************************************	4.1 1.4 5.0 20.0 21.4	COST DATA- OTAL STORA ODNCRETE DR FIGURES SHI W VARIATIO
	EMERGENCY SPILLWAY	STORAGE AT CREST	QUAD-BASHBISH FALLS PRIN SPWY DESIGN ST	199 6.6 268 9.0 361 12.1 592 19.7 791 26.5 842 28.2		135 T STO	######################################	343 112 414 1656 1772	TERIA AND COST DAI BASED ON TOTAL STO CHUTE, D=CONCRETE ORMATION. FIGURES OOT TO SHOW VARIATE E SELECTION OR LAN
	ERGEN	AC A	QUAD	86 51 12 6 12 12 12 12 12 12 12 12 12 12 12 12 12 1	ŀ	SUFFICIENT	QUAD-		ITERIA A BASED O CHUTE, FORMATIO FOOT TO
	E	CREST ELEV TYPE (MSL)	USGS 100-YR	1631.6 1636.1 1641.1 1650.5 1656.6	USGS 100-YR	1655.0 T SUFFICI	USGS 100-YR	1806.3 1789.6 1809.8 1840.6	GN CRITERIA S ARE BASED CRETE CHUTE RY INFORMAT 0.1 FOOT TO
				* * * * * * *		+ + × + + + + + + + + + + + + + + + + +	# :		
		DEPTH AT DAM (FT)	358 AC	5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	390 AC	4 1.2 ****THIS SITE LAC	992 AC	11.2 29.7 49.8 68.1 82.5	BASED ON 1974 S.C.S. DESIGN CRISPILLWAY STORAGE AND COSTS ARE SPILLWAY TYPE CODE— C=CONCRETE TA ARE BASED ON PRELIMINARY INFORMATE TO THE NEAREST 0.1 FOR ACCURATE TO THAT DEGREE.
NDSON		COST/ SURF AC (\$)	= 0.56 SQ HI = 358 AC STREAM WATER QUALITY (B)	48820 38840 33040 29510 27360	= 0.61 SQ MI = 390 AC STREAM WATER QUALITY (B)	*THIS	**************************************	81810 53740 29830 29830	BASED ON 1974 S.C.S. SPILLWAY STORAGE AND SPILLWAY TYPE CODE—C TA ARE BASED ON PRELI ARE SHOWN TO THE NEA ACCURATE TO THAT DEG ** DO NOT USE FOR
AR EA-H	56	AREA (AC)	S6 SQ MATE	1 10 15 23 31 35	61 SQ	**	***** 55 SQ M WATE	10 23 44 60	ON 19
STUDY AREA—HUDSON	BENEFICIAL POOL	COST COST/ DEPTH ELEV STORAGE PER AREA SURF AT AC FT AC DAM (MSL) AC FT IN (\$) (FT)	SITE-HU-0604 DA= 0.56 SQ MI = 358 AC SITE RATING (1) STREAM WATER QUALITY (B)	1 5.3 4860 10 48820 23.7 2720 15 38840 32.5 1800 23 33040 44.0 1440 31 29510 52.0 1300 35 27360 55.4	DA= 0.61 STREAM		SITE-HU-0606 SITE RATING (1) STREAM WATER QUALITY (B)	1771.1 0 0.0 2 111.2 1789.6 100 1.2 8150 10 81810 29.7 1809.8 402 4.9 3050 23 53740 49.8 1828.1 1006 12.2 1290 44 29830 68.1 1842.5 1760 21.2 1020 60 29830 82.5	COSTS ARE BASED ON 1974 S.C.S. DESIGN CRITERIA AND COST DATA. EMERGENCY SPILLWAY STORAGE AND COSTS ARE BASED ON TOTAL STORAGE, EMERGENCY SPILLWAY TYPE CODE— C.=CONCRETE CHUTE, D.=CONCRETE DROP, TABULAR DATA ARE BASED ON PRELIMINARY INFORMATION. FIGURES SHOWN ELEVATIONS ARE SHOWN TO THE NEAREST O.1 FOOT TO SHOW VARIATION BE CONSIDERED ACCURATE TO THAT DEGREE. ** DO NOT USE FOR FINAL SITE SELECTION OR LAND ACQU
	BENEFI	AGE IN	3	0 0 3 3 7 0 14 2 21 4 25 0		0.0	(1)	0.0 1.2 4.9 12.2 21.2	COSTS ARE BEENGENCY SEMENGENCY STABULAR DATECTORS CONSIDERED CONSIDERED
		STORAGE AC FT I	TE-HU-0604 SITE RATING			0	1-0606 RATING	0 100 402 1006 1760	(2) (3) (3) (4) (5) (5) (6)
		ELEV (MSL)	SITE-HU-0604	1605.3 0 1623.6 100 1632.6 208 1644.0 423 1652.1 639	SITE-HU-0605 SITE RATIN	1646.3	SITE-HU-0606 SITE RATIN	1771.1 1789.6 1809.8 1828.1 1842.5	NOTES -

EXISTING SITE HU-0610 (Guilder Pond)

Location:

On Guilder Brook at Mount Everett Road in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N.Y. USGS quadrangle

Surface Elevation 2042

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

5 150 0.25

Potential for

Expansion:

The small drainage area limits expansion potential. pool is already large in relation to the size of the drainage area.

Remarks:

The dam is an earthfill structure about 100 feet long. The principal spillway is a 30-foot long concrete weir located on the right abutment.

Ownership and Use:

The pond is owned by the Commonwealth of Massachusetts, Department of Environmental Management and is used for recreation.

EXISTING SITE HU-0611 (Hunts Pond)

Location:

On Lee Pond Brook about 1600 feet downstream from East Street in Mount Washington, Massachusetts.

Bashbish Falls, Mass.-Conn.-N. Y. USGS quadrangle

Surface Elevation 1600

Surface Area (Acres)

Height of Drainage Area

Dam (Ft.) (Acres) (Sq. Mi.)

574 .90

Potential for Expansion: Raising the pool level by twenty feet would affect East Street. A fifty-acre pool would be created.

Remarks:

The dam is an earthfill structure about 100 feet long. The principal spillway is a 40-foot long concrete weir having a maximum head of 3 feet and provisions for 2 feet of stoplogs and flashboards.

Ownership and Use:

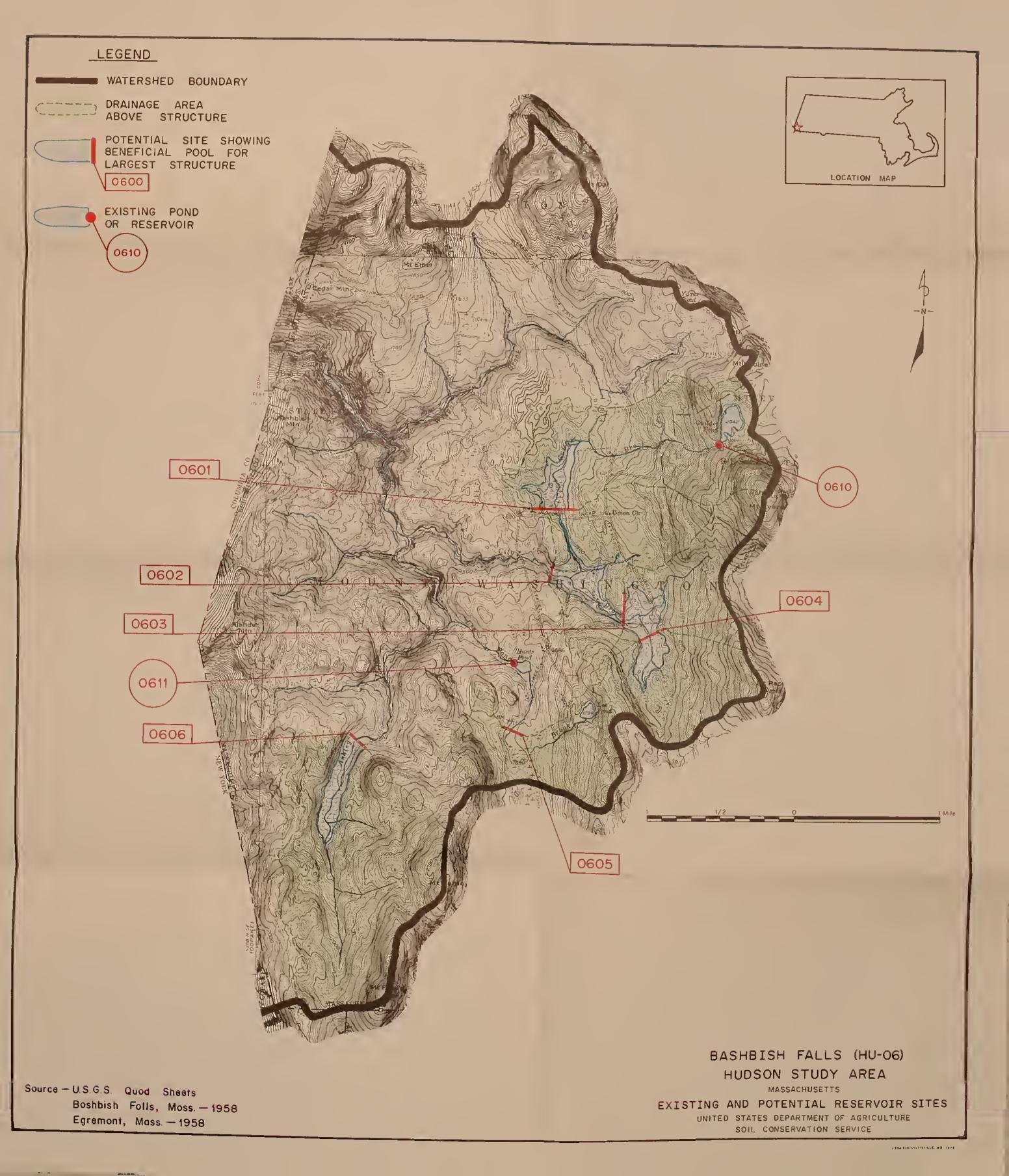
The pond is owned by the town of Mount Washington and is used for recreation.



Site HU-0610 (Guilder Pond)



Site HU-0611 (Hunts Pond)





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